

ecology and environment, inc.

International Specialists in the Environment

Cloverleaf Building 3, 6405 Metcalf Overland Park, Kansas 66202 Tel: (913) 432-9961, Fax: (913) 432-0670

MEMORANDUM

C7X5
Hockins, P. Inc.

TO:

Paul Doherty, EPA/START PO

FROM:

THRU:

Hieu Q. Vu, P.E., CHMM, E & E/START PM RA

DATE:

April 22, 1998

SUBJECT: Removal Assessment: R. V. Hopkins, Inc., Davenport, Iowa

CERCLIS ID No: IAD022096028

SSID: 07X5

TDD: S07-9711-007 PAN: 0687RVSFXX EPA OSC: Jim Kudlinski 200270



S00194819 SUPERFUND RECORDS

INTRODUCTION

The Ecology and Environment, Inc. (E & E), Superfund Technical Assessment and Response Team (START) was tasked by the U.S. Environmental Protection Agency (EPA) Region 7 Emergency Response and Removal (ER&R) program, under Technical Direction Document (TDD) S07-9711-007, to modify and implement a Quality Assurance Project Plan (QAPP), which had been previously used, at R. V. Hopkins, Inc., an active drum-recycling facility in Davenport, Iowa. Specifically, START was tasked to prepare a site-specific site safety plan (SSP), provide site documentation, and manage and document all samples that were collected for laboratory analysis. The EPA on-scene coordinator (OSC) for the project was Jim Kudlinski. START member (STM) Rick Claytor was assigned as the project manager.

The stage

BACKGROUND, SITE DESCRIPTION, AND SITE HISTORY

R. V. Hopkins, Inc. is located at 743 Schmidt Road in Davenport, Iowa (see Attachment 1: Site Location Map). The facility is currently in operation, reconditioning and selling steel drums. The property covers approximately 7.7 acres and is located in a commercial/industrial area in the southwestern part of the city. The northern two-thirds of the property is situated atop an abandoned limestone quarry that has been filled with demolition debris and other fill material.

In June 1984 the E & E Field Investigation Team (FIT) conducted a site investigation under TDD R-07-8402-13A to document the extent of site-generated wastes and to evaluate the potential for those wastes to migrate off-site via ground water, surface water, soil and/or air routes. The final report for the R. V. Hopkins, Inc., site investigation, which was prepared by Region 7 REM/FIT on February 13, 1985, concluded that a wide variety of inorganic and organic pollutants was present in surface soils on the property and also in off-site soils at downgradient locations. The on-site surface soil samples contained lead concentrations ranging from 230 to 20,000 parts per million (ppm). Concentrations as high as 8.4 ppm were reported for phenol and Endrin. Contaminants were also identified in ground water and sediments from monitoring wells that were installed on the property.

On November 30 and 31, 1993, the E & E Technical Assistance Team (TAT) systematically inspected the facility, photographing and documenting leaking, bulging, corroded and/or precariously stacked drums inside the facility. At that time 3,681 drums were present in the warehouse on the south side of the property, 27 of which were identified as leaking and 12 that had observable holes but which were not leaking. Four rows of stacked drums were leaning due to broken pallets or crushed drums.

On January 3, 1994, EPA issued a Unilateral Administrative Order (UAO) to R. V. Hopkins, Inc. Included in the UAO was a requirement that the company properly dispose of hazardous wastes that had accumulated in the warehouse. Those wastes were subsequently transported off site for disposal by the end of June 1994.

On October 8, 1996, at the request of the EPA Region 7 Waste Management Division (WSTM), a Resource Conservation and Recovery Act (RCRA) Compliance Evaluation Inspection (CEI) was performed by EPA personnel at R. V. Hopkins, Inc. At that time, six hundred seventy-five 55-gallon metal drums potentially containing RCRA characteristic hazardous waste were identified on the property. Three hundred thirty-seven of those drums contained material described by the operator as burner ash. Those

drums were staged outside, near the north side of the warehouse. Three hundred thirty-eight 55-gallon metal drums of bag house dust were also being stored outside, north of the bag house, which is located on the west side of the manufacturing building. As a result of that inspection, 16 Notices of Violation (NOV) were issued. The violations included: illegal storage of hazardous waste, per Section 3005 of RCRA; storage of hazardous waste for over 1 year, per 40 CFR 268.50; leaking containers of hazardous waste, per 40 CFR 265.173(b); and unlabeled and undated containers of hazardous waste, per 40 CFR 262.34(a) (2) & 262.34(a) (1).

On May 6 and 7, 1997, the START was tasked under TDD S07-9704-001 to assist EPA with inventory and documentation of drums containing waste, and collection of representative samples. The wastes at the facility had been identified by the operator as either "burner ash" or "bag house dust". The 629 drums containing burner ash were staged in the northeastern portion of the property (see Attachment 2: Site Sketch), these drums (group A) were numbered by STMs, from A001 through A630, (number A509, inadvertently, was not used). One-fourth of the burner ash drums were opened, and about half of the opened drums were sampled. Some of the drums had been labeled as hazardous waste; D006 and D008—hazardous waste numbers for cadmium and lead—were listed when labels were present. Eighty samples were collected from the burner ash drums. Sixty-seven of the 80 samples were analyzed for total metals and Toxicity Characteristic Leaching Procedure (TCLP) metals. Eleven other samples were analyzed for total metals and TCLP metals, as well as volatile organic compounds (VOCs), TCLP VOCs, pH, and flash point. The two remaining samples were submitted for analysis of VOCs, TCLP VOCs, flash point and pH.

The "dust" drums were staged at two locations on the property. One group of "dust" drums was located in the northwest portion of the property. Those 184 drums were numbered from D001 to D184. The second group of "dust" drums was staged to the north of the bag house; those 156 drums were numbered from B001 to B156. Some labels were observed, but none of the drums was labeled as hazardous waste. From the D group, 45 of the 184 drums were opened. The drums were all found to contain a brown-to-gray material that appeared to be bag house dust, as had been indicated by the operator. Nine drums were sampled and analyzed for total metals and TCLP metals. One of the drum samples was also analyzed for total VOCs and TCLP VOCs. From the B group, containing 156 drums, 39 drums were opened and 7 were sampled. All samples were analyzed for total metals and TCLP metals and one sample was also analyzed for total and TCLP VOCs.

While on the site, it was discovered that four semi trailers parked on the property contained drums bearing hazardous waste labels with D006 and D008 designations. Hazardous waste labels were visible on some of the drums in each of the trailers. The drums in each of the trailers were counted, and a photograph was taken of each of the trailers; no samples were collected from any of these drums. Three hundred forty-four drums were identified in the trailers. Two waste piles located in the northwestern part of the property were also sampled. This material, which had been placed on plastic sheeting, was identified by the facility manager as incinerator waste. The largest pile was approximately 20 feet long, 10 feet wide and 2.5 feet deep. A multi-aliquot sample was collected from depths of 0 to 2 inches. The second waste pile was approximately 10 feet by 6 feet and was 3 feet high. It was sampled in a manner similar to the first pile. Both of the waste pile samples were analyzed for total metals and TCLP metals.

Ninety-eight samples, from 96 drums and two waste piles (soils), were analyzed by the laboratory. Thirty of the drum samples and both of the soils were identified as RCRA characteristic waste. Consequently, it was evident that hazardous waste was being held at the R. V. Hopkins, Inc., facility at the time of the assessment. The exact amount of waste could not be determined, because not all of the staged drums and none of the 344 drums located in the semi trailers were characterized.

START was tasked to modify the previously used QAPP (see Attachment 3: Quality Assurance Project Plan), for the followup inventory and sampling of the drums on the property that were labeled as, or staged with, drums containing waste. The site activities were conducted on December 16, 1997, under a criminal warrant that was served by EPA Criminal Investigation Division (CID) and local law enforcement officials. Representative drum samples were collected to determine whether any of the materials being stored (but which had not been inventoried or sampled in May 1997) at R. V. Hopkins, Inc., were RCRA hazardous wastes and, if so, to determine the potential volume and type of the wastes currently being held at the facility.

SITE ACTIVITIES



The majority of the burner ash drums (A Drums) that had been inventoried and numbered in May 1997 were still located in the northeastern portion of the property. The bag house dust (B Drums) had been moved from the area near the bag house; some of them were found with the D Drums in the northwestern part of the property. The D Drums, along with some A Drums and B Drums were staged in the same area that they had occupied in May 1997 (see the attached Site Sketch). Those drums were still on wooden pallets, but they had been pushed together, leaving no spaces, or isles.

The samples that were collected in May 1997 identified the contents of 30 drums and both of the waste piles as RCRA hazardous waste. During the inventory process 23 of these drums were identified; three were found to be empty. Photographs were taken of 19 of the drums and both of the waste piles. One drum, A518, was present but was not photographed. The empty drums were not photographed (see Attachment 5: Photographic Record). The following table provides the status of the drums and waste piles that in May 1997, were determined to contain RCRA hazardous waste.

Sample #	Observed 12/16/97	Drum #	Contaminant	Analysis	Concentration*	Reg. Level*
APXX5100	No	A006	Lead	TCLP	54.3	5.0
APXX5101	No	A013	Lead	TCLP	19.2	5.0
APXX5104	Yes	A033	Lead	TCLP	6.02	5.0
APXX5108	Yes	A050	Methyl ethyl ketone	TCLP	270	200
APXX5107	No	A045	Lead	TCLP	7.41	5.0
APXX5110	Yes	A071	Lead	TCLP	16.5	5.0
APXX5120	Yes	A186	Lead	TCLP	44.2	5.0
APXX5124	Yes	A173	Lead	TCLP	14.5	5.0
APXX5126	Yes	A165	Ignitability	Flash point	45.0°C	<60°C
APXX5130	Yes	A143	Lead	TCLP	7.21	5.0
APXX5137	Yes	A385	Lead	TCLP	75.5	5.0
APXX5142	Yes	A364	Lead	TCLP	11.9	5.0
APXX5146	No	A345	Lead	TCLP	126.0	5.0
APXX5149	Yes	A462	Lead	TCLP	13.1	5.0
APXX5155	No	A488	Lead	TCLP	33.3	5.0
APXX5157	Yes But Empty	A501	Lead	TCLP	39.9	5.0
APXX5159	Yes But Empty	A508	Lead	TCLP	6.69	5.0
APXX5161	Yes (No Photo)	A518	Trichloroethylene	TCLP	2.5	0.5
APXX5168	Yes	A564	Lead	TCLP	11.5	5.0
APXX5169	Yes	A623	Lead	TCLP	11.1	5.0
APXX5170	Yes	A604	Ignitability	Flash point	50°C	< 60°C
APXX5140	No	A372	Lead	TCLP	19.4	5.0
APXX5148	Yes	A337	Lead	TCLP	10.0	5.0
APXX5174	Yes	A430	Lead	TCLP	32.8	5.0
APXX5175	Yes But Empty	A398	Lead	TCLP	8.92	5.0
APXX5176	Yes	A609	Lead	TCLP	16.6	5.0
APXX5180	Still Present	WPI**	Lead	TCLP	59.7	5.0
APXX5181	Still Present	WP2**	Lead	TCLP	11.3	5.0
APXX5185	Yes	D099	Lead & Chromium	TCLP	7.79 & 7.44	5.0

Sample #	Observed 12/16/97	Drum #	Contaminant	Analysis	Concentration*	Reg. Level*
APXX5188	Yes	D165	Chromium	TCLP	10.9	5.0
APXX5190	Yes	D071	Lead & Chromium	TCLP	5.0 & 10.2	5.0
APXX5191	No	B083	Chromium	TCLP	8.62	5.0

KEY: *mg/L = Milligrams per liter.

•• = Waste Pile Samples

*C = Degrees Celsius.

The drum summary sheets that had been completed in May were used as each group of drums was systematically inspected. The drums that were found were checked off. Any hazardous waste label information that had not been recorded was added to the summary sheets. If the drum was not found, a check was not recorded. If the drum was found, but was empty, an "O" was noted on the summary sheet (see: Attachment 4: Drum Summary Forms). Only 490 A group drums, 51 of which were empty, were identified; 629 had been numbered in May 1997. Of the 184 drums that had been identified in May as D drums, 154 were located. Only 63 of the 156 B group drums identified in May were located. The close staging and rusty condition of the B and D group drums made the identification process difficult.

Additional drums that had not been inventoried and numbered had been staged by facility employees with the groups of waste drums. Many in the A area were labeled as hazardous waste. A total of 811 drums was counted in the A area (182 more than were inventoried in May) (this does not include the empty drums). The D area contained 365 drums (25 more than the previous B and D drum count). No additional inventory or drum marking was conducted on the drums located in the B area. The four semi trailers that contained drums with hazardous waste labels were not observed during this site visit.

In the A area the OSC selected 29 drums as representatives of the 372 drums staged in the burner ash area. These 372 drums had not been numbered or inventoried in May 1997. The samples collected from the drums that were selected by the OSC were numbered from AKXX5001 to AKXX5029; the drums were marked with the corresponding numbers. Using a new stainless-steel spoon, the OSC filled one 8-ounce glass jar from each drum. The drums contained gray-to-black material having a pasty, sometimes clumpy consistency. Chips or clumps of varied colors were also observed in some of the drums. A field sheet was completed for each sample collected (see Attachment 6: Field Sheets and Chain of Custody Forms). A photograph of the sample staged on the drum from which it was collected was taken (see the Photographic Record). The sampled drums were inventoried, the hazardous waste label information, along with the volume, OVA readings, and description of the contents were recorded on summary sheets (see Drum Summary Forms). The samples were delivered by Kudlinski on December 17, 1997, to the Region 7 EPA Laboratory in Kansas City, Kansas for TCLP metals analysis.

FOLLOWUP ACTIVITIES.

Laboratory data identified that 15 of the 29 samples contained lead concentrations exceeding the TCLP regulatory level of 5 mg/L (see Attachment 7: Analytical Data). No other metals were identified at concentrations exceeding the TCLP limits. The sample numbers and the lead concentrations are provided in the following table.

	TCLP LEAD SUMMARY TABLE									
Sample	TCLP Lead (mg/L)	Sample	TCLP lead (mg/L)							
AKXX5003	67.5	AKXX5016	16.5							
AKXX5004	48.7	AKXX5020	25.3							
AKXX5006	54.6	AKXX5021	103							
AKXX5007	19.0	AKXX5023	23.1							
AKXX5009	7.89	AKXX5024	17.3							
AKXX5012	20.4	AKXX5026	85.6							
AKXX5014	28.4	AKXX5027	84.0							
AKXX5015	29.5									

CONCLUSIONS AND RECOMMENDATIONS

START assisted EPA with site documentation and collection of representative samples from staged drums containing site-generated waste. Eight hundred eleven drums classified by the facility operator as burner ash were identified during the inventory activities. From the 237 drums that had not been inventoried in May 1997, 29 were selected and sampled. RCRA characteristic waste was identified to be contained in 15 of the drums. The TCLP lead concentrations that exceeded the regulatory level ranged from 7.89 to 103 mg/L. It was evident that hazardous waste was being held at the R. V. Hopkins, Inc., facility at the time of the assessment, and that a majority of the waste that had been identified in May 1997 was still present at the site. Additionally, drums of bag house dust were counted. Twenty-five drums that had not been inventoried and numbered in May were identified. None of the bag house drums were sampled during the December 1997 site visit.

Preremedial Considerations

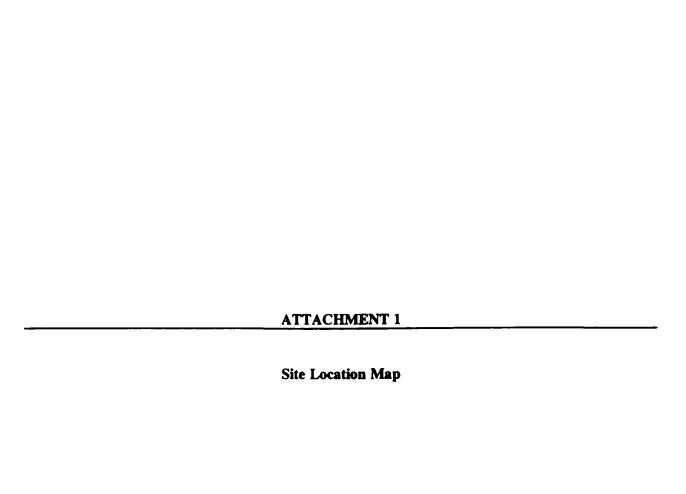
On July 7, 1982, a site inspection (SI) was conducted and an SI report was completed. The R. V. Hopkins, Inc., site has had contaminant pathways (i.e., ground water, surface water, soil exposure and air) examined during the aforementioned previous investigations.

Removal Considerations

The presence of RCRA hazardous waste has been documented in drum contents and waste piles on the property, and past investigations have identified metals and organic contaminants in the soil and ground water at the site. The site meets the removal criteria stated in the NCP 40 CFR 300.415 (b) (2). The Removal Site Evaluation form was completed and attached to the START report submitted under TDD S07-9704-001.

ATTACHMENTS:

- 1. Site Location Map
- 2. Site Sketch
- 3. Quality Assurance Project Plan
- 4. Drum Summary Forms
- 5. Photographic Record
- 6. Field Sheets and Chain of Custody Forms
- 7. Analytical Data



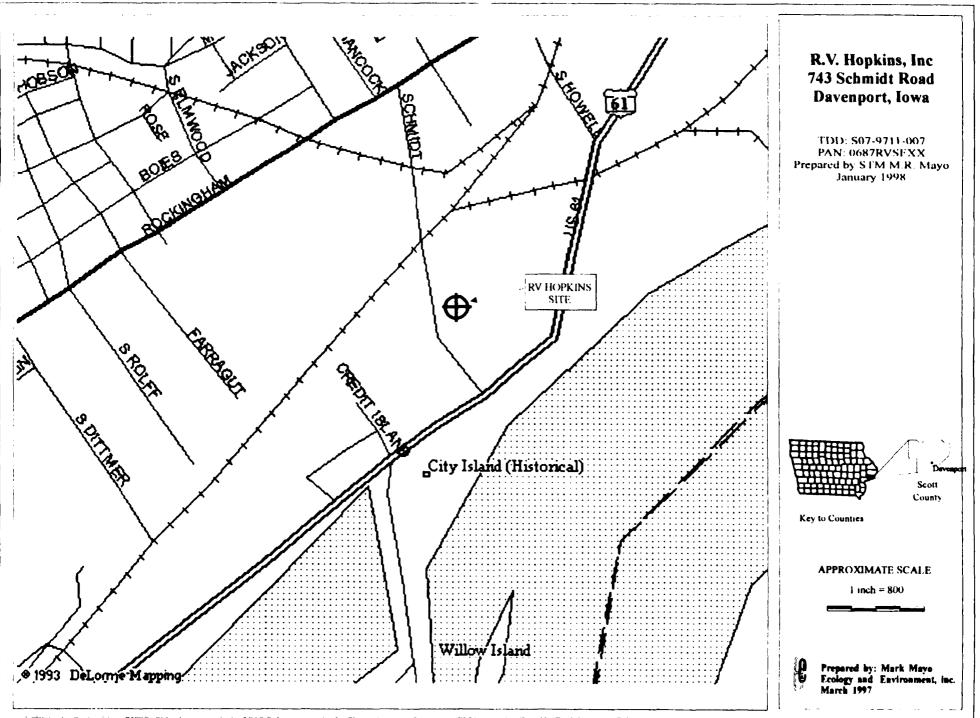
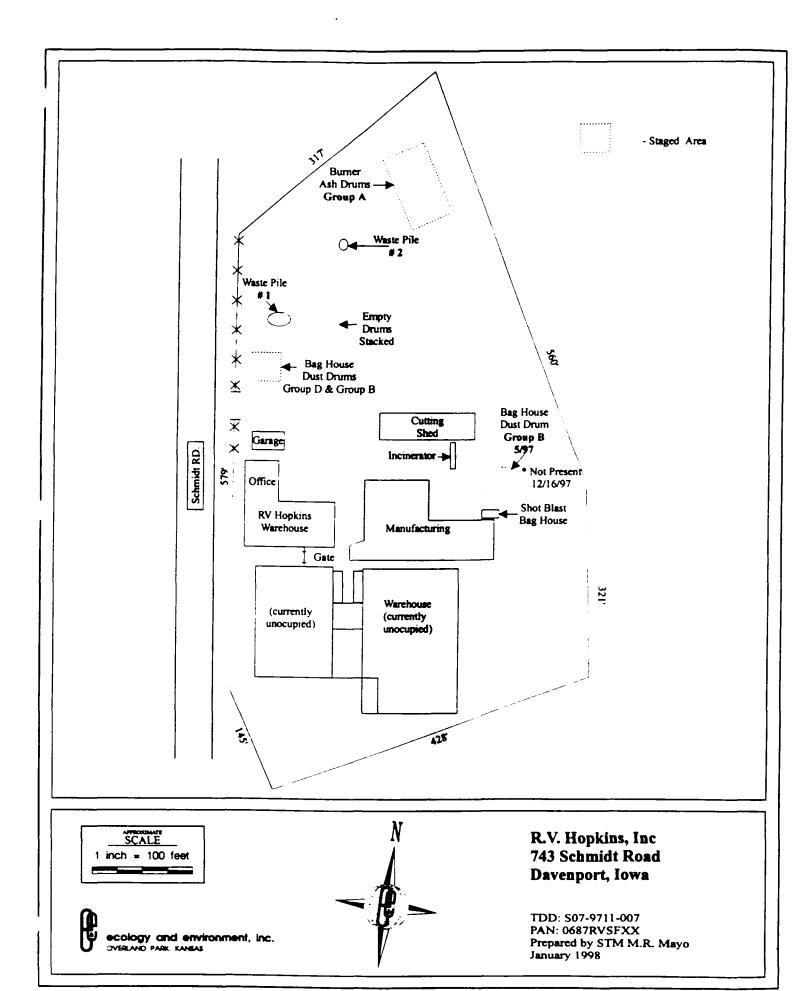
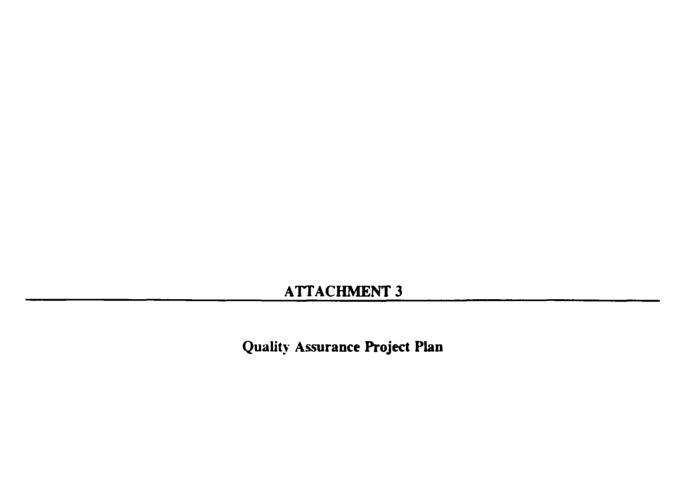


Figure 1 Site Location Map

ATTACHMENT 2

Site Sketch







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Cloverleaf Building 3, 6405 Metcarf Overland Park, Kansas 66202 Tel: (913) 432-9961, Fax: (913) 432-0670

MEMORANDUM

TO:

Jim Kudlinski, EPA/OSC

FROM:

Rick Claytor, E & E/STM ZP For RC

THRU:

Hieu Q. Vu, P.E., CHMM, E & E/START PM Ry G. 490

DATE:

November 13, 1997

SUBJECT: Addendum to the Quality Assurance Project Plan for the R. V. Hopkins Site, Davenport,

Iowa

TDD: S07-9711-007 PAN: 0687RVSFXX EPA OSC: Jim Kudlinski

Please review and comment on the attached addendum to the Quality Assurance Project Plan (QAPP) for the R. V. Hopkins site in Davenport, Iowa, where additional drum sampling is proposed to be conducted during the week of December 1, 1997. The original QAPP was approved (with comments) by the U.S. Environmental Protection Agency (EPA) Region 7 Quality Assurance Office (QAO) on April 24, 1997. The attached QAPP has been slightly modified from the original version to address the comments provided by the QAO.

ADDENDUM

to

QUALITY ASSURANCE PROJECT PLAN

for

DRUM SAMPLING

at

THE R. V. HOPKINS SITE DAVENPORT, IOWA

Prepared For:

United States Environmental Protection Agency Region 7 Superfund Division

Prepared By:

Ecology and Environment, Inc.
Superfund Technical Assessment and Response Team

November 12, 1997

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La Pa For Rick Clayfor	11/13/97
E & E START Project Manager	Date
RALL for Here O Us	11/13/92
E & B START Program Manager	Date
EPA Site Manager	Date
EPA Regional Quality Assurance Manager	Date



ecology and environment, inc.

CLOVERLEAF BUILDING 3, 6405 METCALF, OVERLAND PARK, KANSAS 66202, TEL. 913/432-9961

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ADDENDUM TO QAPP FOR DRUM SAMPLING AT THE R.V. HOPKINS SITE DAVENPORT, IOWA

The original Quality Assurance Project Plan (QAPP) for the R.V. Hopkins site was written in April 1997, and field work was conducted on May 6 and 7, 1997. Background information for the site is provided in that QAPP. At the time of the May 1997 field activities, 629 staged drums of burner ash and 340 drums of bag house dust (as identified by the facility operator) were inventoried and given a unique number. Samples were collected from 96 of the inventoried drums. Laboratory analysis identified that 25 of the drums contained hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). In addition, during the site activities, 344 drums were observed in four semi trailers that were parked on the site. These drums were not sampled or numbered, and no information concerning their contents was available.

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(b) (7)(E)

EPA On-Scene Coordinator (OSC) Jim Kudlinski will serve as the

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site manager, and four members of the Ecology and Environment, Inc. (E & E), Superfund Technical Assessment and Response Team (START) will compose the sampling team. The original QAPP will be implemented except where modifications are noted in the attached outline.

Some of the drums that were sampled in May 1997 will be re-sampled, assuming that they are still at the site and can be located. Samples will also be collected from drums that were not inventoried (were not numbered) and have been generated since the May 1997 site visit. It is not known how many additional drums will be present. It is estimated that no more than 50 samples will be collected to represent the materials held at the facility. The determination of which drums to sample will be made by the OSC in the field. The samples will be analyzed by the EPA Region 7 Laboratory as before. The samples will be analyzed for Toxicity Characteristic Leaching Procedure (TCLP) metals, total concentrations of TCLP metals, and pH. If any samples are sludges or liquids, those will also be analyzed for TCLP volatile organic compounds (VOCs) and flash point.

OUTLINE OF CHANGES TO THE ORIGINAL QAPP FOR DRUM SAMPLING AT THE R.V. HOPKINS SITE DAVENPORT, IOWA

1.0	PRO	DJECT MANAGEMENT	
	1.1	Distribution List	e determined
	1.2	Project/task Organization	As noted
	1.3	Problem Definition/background	Unchanged
	1.4	Project/task Description: Drum samples will be collected from: 1) previously san identified as containing RCRA hazardous waste, and 2) drums that have been by the facility since the previous sampling event in May 1997 (i.e., drums to inventoried in May 1997 and/or drums identified by the operator as burneshouse dust and/or any unlabeled drums located on the property). Fifty san collected to represent the drummed materials held at the site.	en generated hat were not r ash or bag
	1.5	Quality Objectives and Criteria for Measurement Data	Unchanged
	1.6	Special Training Requirements/certification	Unchanged
	1.7	Documentation and Records	Unchanged
2.0	ME.	ASUREMENT/DATA ACQUISITION	
	2.1	Sampling Process Design: Unchanged, except that approximately 50 drum same collected.	nples will be
	2.2	Sampling Methods Requirements: Unknown number of drums present, a massamples will be collected.	ximum of 50
	2.4	Analytical Methods Requirements	Unchanged
	2.5	Quality Control Requirements	Unchanged
	2.6	Instrument/equipment Testing, Inspection, and Maintenance Requirements	Unchanged
	2.7	Instrument Calibration and Frequency	Unchanged
	2.8	Inspection/acceptance Requirements for Supplies and Consumables	Unchanged
	2.9	Data Acquisition Requirements	Unchanged
	2.10	Data Management	Unchanged
3.0	ASS	ESSMENT/OVERSIGHT	
	3.1	Assessments and Response Actions	Unchanged
	3.2	Reports to Management	Unchanged
4.0	DA	ΓΑ VALIDATION AND USABILITY	
	4.1	Data Review, Validation, and Verification Requirements	Unchanged
D.C.			

OUTLINE OF CHANGES TO THE ORIGINAL QAPP FOR DRUM SAMPLING AT THE R.V. HOPKINS SITE DAVENPORT, IOWA (Continued)

4.2	Validation and Verification Methods	. Unchanged
4.3	Reconciliation with User Requirements	. Unchanged
ATTAC	HMENTS:	
A:	Site Map	. Unchanged
B:	Analytical Services Request Form	form attached

QUALITY ASSURANCE PROJECT PLAN

FOR

DRUM SAMPLING AT THE R. V. HOPKING SITE

DAVENPORT, IOWA

Prepared For

U.S. EPA Region VII Superfund Division

Prepared By:

Ecology and Environment, Inc. Superfund Technical Assessment and Response Team

April 9, 1997

510 QQIX5

HPA Region VII Quality Assurance Manager

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ATTACHMENTS

- A: Site MapB: Analytical Services Request Form

1.0 PROJECT MANAGEMENT

1.1 Distribution List

EPA - Region VII Jim Kudlinski, Site Manager

Paul Doherty, EPA/START Project Officer

Ernie Arnold, QA Manager Andrea Jirka, Lab Director

Ecology and Environment, Inc./START Rick Claytor, Project Manager

Joe Chandler, QA Manager

Hieu Q. Vu, E & E/START Program Manager

1.2 Project/Task Organization

Jim Kudlinski, an on-scene coordinator (OSC) for the Region VII U.S. Environmental Protection Agency (EPA), will serve as the site manager for the activities described in this Quality Assurance Project Plan (QAPP) to be conducted at the R. V. Hopkins site in Davenport, Iowa. He will be responsible for overall coordination of site activities, ensuring implementation of the QAPP, and providing periodic updates to EPA regional management concerning the status of the project, as needed. Ernie Arnold, Region VII EPA Quality Assurance (QA) Manager, will be responsible for review and approval of this QAPP. Andrea Jirka, EPA Laboratory Director, will coordinate/schedule laboratory analysis, data review, and validation of results.

Six members from the Ecology and Environment, Inc. (E & E), Superfund Technical Assessment and Response Team (START) will compose the sampling team. Rick Claytor will serve as the project manager, with an assistant to be selected at a future date. The team will be responsible for acquisition and calibration of sampling equipment, sample collection, field documentation, and submittal of the samples to the Region VII EPA Laboratory in Kansas City, Kansas, for analysis. Joe Chandler, E & E QA Manager, will provide technical assistance, as needed, to ensure that necessary QA issues are adequately addressed.

1.3 Problem Definition/Background

The R. V. Hopkins site is located at 743 Schmidt Road, just north of West River Road in the southwest portion of Davenport. The site occupies approximately 7.7 acres and is situated in a commercial/industrial area. The structures on the site include two office/warehouse buildings, a manufacturing building, a warehouse, a small garage, a drum cutting shed and an incinerator. The buildings are on the southern part of the site, with the northern part of the property being open. (Attachment A: Site Map).

The R. V. Hopkins facility is currently in operation, reconditioning and selling used steel drums. The plant employs about 32 persons. Approximately 10,000 drums per month are processed by the facility. The interiors of the drums are cleaned by one of two processes: a dry process or a wet process. The dry process is used for open top drums and is accomplished by inverting the drums over a burner. This generates a burner ash, which is managed as toxic characteristic hazardous waste (D006 and D008).

The wet process involves immersing the closed-top drums in an alkaline bath to clean the interiors of the drums. The process takes place in one tank, and the sludge that is generated is removed from the tank every 2 to 3 weeks and is reused after it is allowed to settle out in a 55-gallon drum. The hardened caustic sludge is then returned to the tank, and water is added to allow the process to continue. The exterior of each drum is stripped of paint in a shot blast device located within the manufacturing building. This process generates dust that is collected in a bag house and then placed into drums.

On November 30 & 31, 1993, the E & E Technical Assistance Team (TAT) conducted a systematic inspection of the facility, photographing and documenting leaking, bulging, corroded and/or leaning drums inside the facility. At that time 3,681 drums were present in the warehouse, 27 of which were identified as leaking and 12 with observable holes but which were not leaking. Four rows of drums were leaning due to broken pallets or crushed drums.

On January 3, 1994, EPA issued a Unilateral Administrative Order (UAO) to R. V. Hopkins. Included in the UAO was a requirement that Hopkins properly dispose of hazardous wastes that had accumulated in a warehouse on the south side of the property. Those wastes were transported off site for disposal by June 1994.

On October 8, 1996, at the request of the EPA Region VII Waste Management Division (WSTM), a Resource Conservation and Recovery Act (RCRA) Compliance Evaluation Inspection (CEI) was performed at R. V. Hopkins. At that time six hundred seventy-five 55-gallon drums of hazardous waste were identified on the property. Three hundred thirty-seven 55-gallon drums of burner ash were stored at the facility, they were staged outside, near the north side of the warehouse. Three hundred thirty-eight 55-gallon drums of bag house dust were stored outside, north of the bag house, which is located on the west side of the manufacturing building.

As a result of that inspection, 16 Notices of Violation (NOV) were issued. The violations included: illegal storage of hazardous waste, per Section 3005 of RCRA; storage of hazardous waste for over 1 year, per 40 CFR 268.50; leaking containers of hazardous waste, per 40 CFR 265.173(b); and unlabeled and undated containers of hazardous waste, per 40 CFR 262.34(a) (2) & 262.34(a) (1).

1.4 Project/Task Description

START will inventory, label, and open all of the drums that are determined to potentially contain RCRA hazardous waste. The drums are the ones which have been identified as burner ash and bag house dust and staged by the operator. Approximately 10% of the drums (about 100) will be sampled; those drums will be selected on the basis of representativeness. The solid drum samples will be analyzed for Toxicity Characteristic Leaching Procedure (TCLP) metals, total concentrations of the TCLP metals, and pH. If the samples collected contain sludges or liquids, they will also be analyzed for TCLP volatile organic compounds (VOCs) and flash point. The information will be used to determine whether the stored material is hazardous and to estimate a waste volume.

Field activities are scheduled to begin May 5, 1997, and are expected to take about 5 days to complete. Samples are anticipated to be submitted to the Region VII EPA Laboratory in Kansas City, Kansas, for analysis on May 9, 1997. Procurement of supplies and equipment that are necessary to complete the sampling activities will be coordinated by START personnel.

1.5 Quality Objectives and Criteria for Measurement Data

The data quality objective is to provide valid data of known and documented quality to:

- 1) Determine if any material stored at R. V. Hopkins is RCRA hazardous waste, and
- 2) Determine the volume and type of hazardous materials that are currently held at the facility.

Goals for analytical precision and accuracy are described in the analytical SOPs referenced in Section 2.4 of this QAPP. Because the determination of variation within the drum samples will not be critical to achieving the goals of this project, no duplicate samples will be collected to evaluate field precision. Representativeness will be addressed by collecting all samples as described in this QAPP. Comparability will be addressed by collecting, analyzing, and reporting all data as described in this QAPP.

1.6 Special Training Requirements/Certification

The only formal training required of site personnel will be the completion of a basic 40-hour health and safety (Hazardous Waste Operations and Emergency Response [HAZWOPER]) training course and annual refreshers. Familiarization with drum sampling equipment/procedures will also be necessary for the START sampling team.

1.7 Documentation and Records

START personnel will maintain a field logbook to record all pertinent activities associated with the sampling event. Appropriate documentation pertaining to photographs taken by START will also be recorded in the field logbook. Sample documentation will follow Region VII EPA/ENSV SOP #2130.3B: Identification, Documentation and Tracking of Samples. Information pertaining to drum samples (i.e., sampling dates/times, drum numbers, etc.) collected during this event will be recorded on LAST field sheets provided by Region VII EPA personnel (generated by the Labor and Sample Tracking System [LAST]). Labels generated by the LAST system will be affixed to sample containers, identifying sample numbers, dates collected, and requested analyses.

Analytical information will be handled according to Region VII EPA/ENSV SOPs #2410.1B: LABO Analytical Data Management Procedures and #2410.10A: Analytical Data Submission Packages.

2.0 MEASUREMENT/DATA ACQUISITION

2.1 Sampling Process Design

The physical appearance and quantity of each drum's contents will be noted in a field logbook. After all drums have been opened and inspected, approximately 10% will be selected for sampling to represent the most common waste streams (see Section 2.4 for analytical parameters). A headspace reading for VOCs will be taken from the air space in the top of each drum when it is opened, using an organic vapor analyzer (OVA), to determine a relative concentration of VOCs in the drums contents. If the reading exceeds 500 parts per million (ppm), and if the drum's contents are non-solid, a sample

will also be collected for TCLP analysis of VOCs, in addition to the other parameters listed in Section 2.4. The physical characteristics of the material within each drum will be recorded on the respective field sheet at the time of sample collection.

Each representative drum sample will be collected with dedicated glass thieving rods or new stainless steel spoons and placed in laboratory-cleaned sample collection jars/vials. In order to prevent cross contamination, a clean pair of disposable gloves and a new sampling device will be used for each sample. If a drum contains multiple phases, each phase will be sampled and submitted as a separate sample.

2.2 Sampling Methods Requirements

Drum sampling will follow the guidelines included in EPA Environmental Response Team (ERT) SOP #2009: "Drum Sampling". It is estimated that 100 drums will be sampled, additional drums that were not present in October 1996 are anticitated. A total of 150 samples could be collected if drums are found to contain more than one phase.

Disposal of investigation-derived wastes and procedures for equipment/personal decontamination will be addressed in a site-specific health and safety plan that will be prepared by START.

2.3 Sample Handling and Custody Requirements

Samples will be collected in accordance with procedures defined in Region VII EPA/ENSV SOP #2130.4B: Sample Container Selection, Preservation and Holding Times. Chain of custody will be maintained for the collected samples, as directed by Region VII EPA/ENSV SOP #2130.2A: Field Chain of Custody for Environmental Samples. All samples will be hand delivered to the Region EPA Laboratory, where they will be accepted according to Region VII EPA/ENSV SOP #2420.1A: Sample Receipt & Log-In.

2.4 Analytical Methods Requirements

The solid drum samples will be analyzed for TCLP metals (excluding mercury), total concentrations of the TCLP metals (excluding mercury), and pH. Non-solid drum samples will additionally be analyzed for TCLP VOCs and flash point. The samples will be analyzed according to the following SOPs:

- TCLP extraction procedure: Region VII EPA/ENSV SOP #3171.1A: Toxicity Characteristic Leaching Procedure (TCLP).
- Drum samples for metals: Region VII EPA SOP #3122.2B: Analysis of Metals by TJA ICAP 61 using an inductively coupled plasma (ICP) spectrometer.
- Volatile organic compounds: Region VII EPA/ENSV SOP #3230.1C: GC/MS Analysis of Volatile Organic Compounds.
- pH: Region VII EPA/ENSV SOP #3135.4A: pH, Soil, or SOP #3135.5A: pH Lab, Water, as determined by the sample matrix.
- Flash point for the non-solid samples: SW-468 Method 1020: Setaflash Closed-Cup Method for Determining Ignitability.

Detection limits that are typically reported by the Region VII EPA Laboratory for those analyses are expected to be adequate for this activity. See Attachment B for a summary of projected samples and

requested analyses. The overall implementation of a quality assurance program by the laboratory is addressed in Region VII EPA/ENSV SOPs #1610.1C: Regional Laboratory Quality Control Policy and #1640.1A: Region VII Laboratory Quality Assurance Project Plan.

2.5 Quality Control Requirements

Because dedicated supplies will be used for drum samples (i.e., disposable glass thieving rods and new stainless steel spoons), no rinsate samples will be collected to assess the potential for cross-contamination. Because total precision of sampling and laboratory analysis will not be evaluated for this activity, no field duplicate samples will be collected. Analytical error (precision and accuracy) will be determined by the analysis of laboratory-prepared duplicates and spike samples. Those criteria, along with other laboratory QC elements, will be addressed in accordance with the previously referenced analytical SOPs and Region VII EPA/ENSV SOP #1610.1C.

2.6 Instrument/Equipment Testing, Inspection, and Maintenance Requirements

Testing, inspection, and maintenance of analytical instrumentation will be performed in accordance with the previously referenced analytical SOPs and manufacturers' recommendations.

2.7 Instrument Calibration and Frequency

The only field instrument that will require calibration is a Foxboro Model 128 OVA, which will be calibrated at the site according to the manufacturer's specifications immediately prior to drum opening. Calibration of laboratory equipment will be performed as described in the previously referenced analytical SOPs and manufacturers' recommendations.

2.8 Inspection/Acceptance Requirements for Supplies and Consumables

No special requirements are needed.

2.9 Data Acquisition Requirements

No data from other sources will be used.

2.10 Data Management

All laboratory data acquired by the Region VII EPA Laboratory will be managed in accordance with Region VII EPA/ENSV SOPs #2120.2A: Document Control and #2410.10A:Analytical Data Submition Packages", and 2410.1B.

3.0 ASSESSMENT/OVERSIGHT

3.1 Assessments and Response Actions

Field audits of sampling procedures may be scheduled for this sampling event. Assessments and response actions pertaining to analytical phases of the project are addressed in Region VII EPA/ENSV SOPs #1610.1C and #1640.1A and in the previously referenced analytical SOPs. Those documents

identify out-of-control conditions, who is responsible for initiating corrective actions, and what corrective steps should be taken.

3.2 Reports to Management

Laboratory results will be reported to the EPA site manager (by lab personnel) in accordance with Region VII EPA/ENSV SOP #2110.1B: Labor and Sample Tracking (LAST) at ENSV. A letter report describing the sampling techniques, locations, problems encountered (with resolutions to those problems), and interpretation of analytical results will be prepared by START and submitted to EPA, following completion of the field activities described herein and receipt of validated laboratory data. A summary report will also be prepared by the EPA site manager for submittal to Region 7 EPA management to document the status of the site and specify further response actions that are warranted.

4.0 DATA VALIDATION AND USABILITY

4.1 Data Review, Validation, and Verification Requirements

Data review and verification will be performed by a qualified laboratory analyst and the laboratory's section manager, as described in Region VII EPA/ENSV SOPs #1610.1C and #1640.1A. The EPA site manager will be responsible for overall validation and final approval of the data, in accordance with the projected use of the results.

4.2 Validation and Verification Methods

The data will be validated in accordance with Region VII EPA/ENSV SOPs #1610.1C and #1640.1A. QC spot checks will be performed by Region VII EPA Laboratory personnel, following criteria outlined in Region VII EPA/ENSV SOPs #1640.1A and #1610.5A: Quality Control Spot Checks of Regional Laboratory Data Packages.

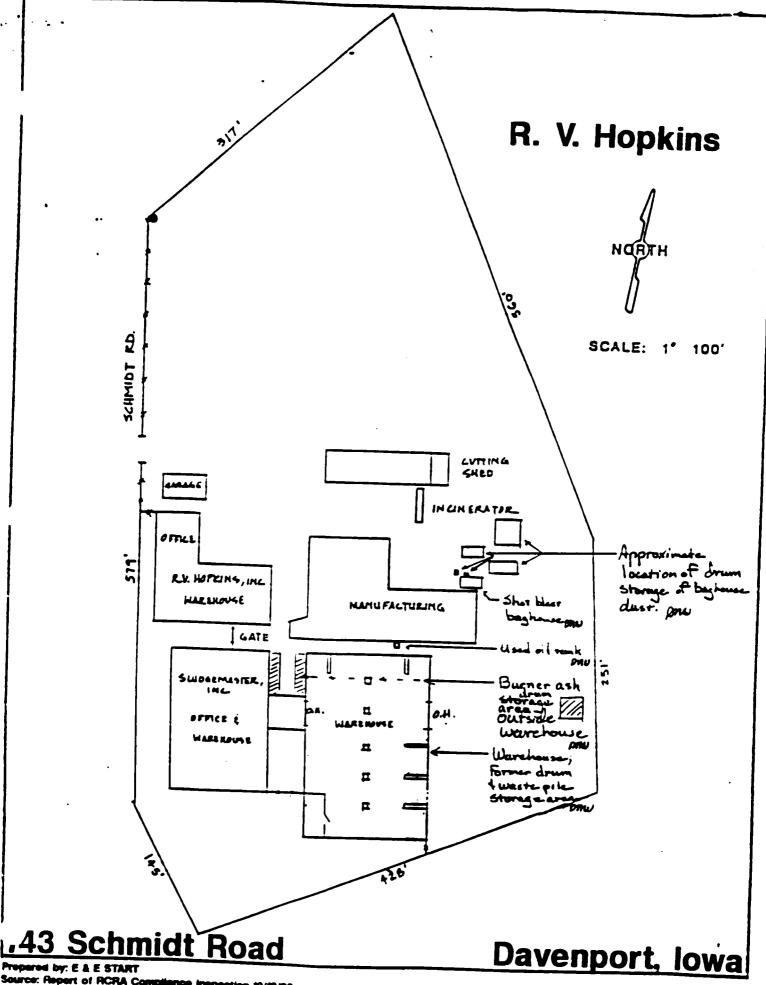
The EPA site manager will inspect the data to provide a final review and approval before it is entered as valid data into the LAST system. The EPA site manager will also compare the sample descriptions with the field sheets for consistency and will ensure that any anomalies in the data are appropriately documented.

4.3 Reconciliation with User Requirements

If data quality indicators do not meet the project's requirements as outlined in this QAPP, the data may be discarded, and re-sampling and/or re-analysis may occur (as determined by the EPA site manager).

ATTACHMENT A

Site Map



recycled paper

ecology and environment

ATTACHMENT 4

Drum Summary Forms

RC/LKS

b 12/14 28	R. V. Hopkins Drum Summary	Dave	aport, Ia. TDD: SO7-97	04-001 PA	PAN: 0494RVSFXX			
DRUM	# Descr. of Contents	Vol	Comments	OVA	Samp#	Dat		
AZEI	NO	1	purner cush (sice) , upa	K	APXX5	T		
A CC2	.VC		SIZIAT					
Acc 3	NO		opash from surfect	·				
14004	NO		burner ash from bur cleaning 5/2/97	Face				
A 005	but material	f	top ash from surfa	100		5/0		
12 006	wown gray ash	F	row burn ash stay 15	500	100	5/6		
4 007		1						
A008								
A009								
4010	419/97 Door 1 5000							
AOII	11.010 , LOOK + LOO"					_		
A.012								
A013	thinks of yellow	F	H8196 DOCL, DO	09 21/2	101	5161		
A 014								
A015								
Acib								
AU17	gray am + chincor	15		71000				
A018	gray ash + Clinker	F		71000	102	5/4		
AOA								
A020			•					
AG2i	gray ask + clinker	F		21/2				
A022								
A023								
A024								
H025	brown dust	F		4	103	5/4		
A026		F						
A 027	ash + clinux							
1028						 -		
AC29								
A .30	crimica + charker	F		Ci				

R. V. Hopkins Drum Summary

Davenport, Ia.

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DRUM#	Descr. of Contents	Vol	Comments	OVA	Samp#	Date
H031						
H032						
11033 1	rayam - wet	F		21000	104	5/6/9
1034 P	aini we ste and ash	F	purner a. n - stay	400	105	5/6/9
11035						
1036						
nc 37 0	book gray ash	F		850		
11038	· · · · · · · · · · · · · · · · · · ·		•			
1:39 V	भारत र मुराम व क्रम	6		65		
AC40 3	ory busher with - stag	1=		200	106	5/4/9
11.041		片				
11042 in	wirer wan + 510cm	F	STO IT LOW 10 DAMPS 1= 2	300		
1043			SECT.	300	· · · · · · · · · · · · · · · · · · ·	
A044						
11545 m	rayasn + slow	F	ros 2 down 11 if yer 10	Siac	107	5/6/9
nc46						,,,,
11047 a	sh , paint wist	1		>1000		
11:48	1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-				···	
11:49 av	my 2 m	F	112996 ace that DOCK - DOCK	71000		
rt050 5	141,quil	F		>100	108	516h
WATE HE	1000 - 5000 + 5000	1,-1				
/	ene Latin, Long wound					
(13 mm - 1 1 1 1	137 107 - LANGE - 1					
11654						
rtc55					-	
17.56	24/46 2006 + 2004					
11-77 1" "	12 - 100 - 2004 - 2004					
A058						
11059						
AC 60 1	ruid of paper filters	1/2		 , 		

R. V. Hopkins Drum Summary Davenport, Ia.

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	DRUM	# Descr. of Contents	Vol	Comments	OVA	Samp#	Date
ţ	A061						
	MOUZ	25m + ilineur	F		2.5		
	1063						
	17064						
	HOLE	·					
15	1506	HELP 1/2/00 1000 1000	F	11124196 ace oute 10006+0009	7100	178	15/4/9
	11067						
	11268	ash + chruser	300	burner ash	1	129	51619
	17.69						
	AU70	1/17/9 DODG + DODG					
j.	P271	04n2 " thinkir 6/25/24 1500 3/1/95 contino	C	Shork acc u/5/26, acc	13	110	5/6/9
U	AT: 72						
١,	12c 73						
	A: 74						
	Az: 75						
	n 76						
	1077						
ح ک	17.78	redivious liquid	F		15	111	51-19
	AC 79					···	
	A080						
	AC81						
ļ	H1.82						
q	NT83						
Y	P184			**************************************			
ļ	1 85	USh relinew	F		1	112	5/6/97
	PT:86	usn. Uneir	F	1129196 FER BANDERS & COPPE	50	113	5/6/97
	A'_87		-	THE WELL OF THE PARTY OF THE	, , <u>, , , , , , , , , , , , , , , , , </u>		
i	4088						
ļ	AC89						
, ,	A090	will a report	8	MINIAN DEN COOL COS	>1r00	114	516197

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DRUM#	Descr. of Contents	Vol	Comments	OVA	Samp#	Date
A121	-		and the second s			
1122	; -					
A 123						
A124				<u>. </u>	-	
A 125				<u> </u>		
A 126				<u> </u>		
A127				- 41		
A128	Present Ringsh writing	F		2CE	116-	5/6/9-
A 129				<u> </u>		<u></u>
A 130			·	-		
V131				 		<u> </u>
H132	HLBL					
	2/10/97 1006 + 2006			<u> </u>		
A134	eranash L Tankin			000		
7	mubic Looker	7500		900		
A136		· .				
A 137						
A138	onay atr - cunker	FC	<u> </u>	100		
F1137			<u> </u>	300		
A 140	im, promit	F		400	131	5/6/17
2 112 4	+LBL 7/19/57 DOOG DOPS	7		700	101	3/0/1/
A143 G	1971 1 page 6005 1971 1 flunt 414576 1862 2/14/97 2006-5.18	F	2/11/97 acrack DOCK - WOR	>1002	130	5/6/97
	25/2 24/2/7/ Scot - 5. 28	F	markly usr DOC6 + WOY.	12C	100	<u> </u>
A145		,				
A146						
A147 0	ングト	1	<u> </u>	105		
A148	whe! Door + Doos	-	Gurrerathe DOOL+ POOS		129	5/6/97
A149	8/.7/- 0009	<u></u>				
A 150						

R. V. Hopkins Drum Summary Davenport, Ia.

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DRUM	Descr. of Contents	Vol	Comments	OVA	Samp#	Date
A181		1	·			
A182						
A 183						
AISY	ash-clinker	E		Lan	121	5/1/17
A 18=		1				_
A 186	Pount Student	16	Marga ash DOS	1 DOCS >1000	120	5/6/97
A 187	11:29/16 Donothook				~	
A 188	H LBC 11/2 9/96 Dno6 + 00) (
A189	Some? POUG+NUP	F	11/29 pol Der.	2 2008 2	1 1 2 2	
14190						
A 191	25h	7		Ø	119_	5/4/7
A192						
A193	115/95 Dos?					
[1194	am	F		Ø	118_	5/497
A195	1/20194 :			-	1 41 a	-
A196						
A197	am	F		.T	ت دفس باید د	
A 198						
1199						
A 200	11/24/46 DOOG + 1004 11/24/46 DOOG + 1004				<u>i</u> .	
p 201	11/21/96 DOOL+12.					
A02	abn	F		1		·
A 203						
×204					<u>.</u>	- 11
H205	asn	F		\mathcal{C}	117	5/6/17
A206	Cierra il per soon	1/2				_
A 207					•	
A208						
4209					· · · · · ·	
A210	11/26/96 DOOG + DOOS					

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DRUM # Descr. of Contents	Vol	Comments	OVA	Samp#	Date
A241					
YH 242					
H243					
4A244					
A245					
4246					
4/247					
A248					-
A249					
A250					
A251					
A 252 a4n + 5/ndae	F		ico.	132	5/6/97
A 253					
19 254 asn + Sludge - slag	F	·	700		
A 255 HLEL Describes				·	
A 256					
A257					
A 258					
A 259					
A260					
A261					
A262 10th 2006 + Door					
A263					
A264 4/1/25 Doog +12000					
7260 4/1/25 DOOG + DOOS					
A266					
1A267					
A 268 HIGH DOOL + DOUR H269 4/9/97 DOOL + DUZY					
A269 4/9/97 DOUG + DUDY					
A270					

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DRUM	# Descr. of Contents	Vol	Comments	OVA	Samp#	Date
A301					~	
1302						
A 303						
A 304	asn + sudge	F		700	~	
A305	,					
A306						
A 307				<u> </u>	- 1	
A 308				1		
A 304				<u> </u>		
1310	ash	F	Held, noc gar Door Dood	1	•	
A 311						,
A 312						
A 313						
A 314						
A 315			 		- +41 1 7	
A 316						
A3IT			·			
A 318	guise -	F		3	-40	
A 319	mudge	F		3	177.	56197
A 320	asn	Y2	·	Ø		
A 321					-	
H 322						
H323						
A 324	HLBC					·
A 325	12/28/96 1006 DOOR					
A 326						
H327						
7328		<u> </u>				
A329					,. 	
A 330))		1

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	DRUM :	# Descr. of Contents	Vol	Comments	OVA	Samp#	Date
	A 3601	1	F	+18/95 acc ank 0006 2005	25		
	A 362	05in	F		200	143	5/1/97
· ·	A 363						
4	A 364	asn	F		Ø	142	5697
\int	H 365						
4	A366						
[A367						
	A368						
	A 369	のふり	F		7/000		
	A370						
5{	A371	Sluar 12/28/96 Door	F	12/28/96 (100) 100	iO	141	5/6/97
	A372	asn	F		3	140	5/6/97
Y	4373						
L	A374	asn	F	12/28/96 DOOK, FOO	99		
	A375						
	A376	አ ና ካ	F	0006,700	0	139	5/6/97
	4377	i					,
1	A 378	HCBL 2/19/97 DODG+2008					
	A379						
	A 380	asm	1				
	A381	·					
¥	A382	245M 12/28/96 NOOG+ DOOF	F	15152120 DOCKDOR	10	138	5/6/97
1	A383	12/25/96 BOOK + DOX					
<u> </u>	A384						
1	A 385	25h paint waste	F	419197 Docs, Acog	2000	137	51497
	A386						
1	A 387	30/10, Plash 6-1. Xe migre		21997 DEOLESES	Ø		
را		Glubel High book	1	219 MA DOCK DOCK	200	136	5/6/97
4	A389	419/97 Dock + DOUS					
Y	A390	41.9107 2004 5714					

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DRUM #	Descr. of Contents	Vol	Comments	OVA	Samp#	Date
A 421						
P422						
A423						
P424						
A425						
A426						
A427						
A428						
A 429	11.00 4/1/95 - Door + Sour					
A430	ash	74		400	174	\$6197
A431						
A432	25/17 Hill work	F		100		
A433	1.36 2197 - Bary + 2007					,
1A434						
A435						
A436					-	
A 437						
	2/19/97 Dodb + thes					
A439						
A44C						
A441						
A442	419/07 1006 + NOCE					
A443	2/19/97 Dock-boos					-
A444	HLBL 12/28/96 Fook + Darg HLBL					
	HLBL 12/28/96 Dock+ Dock MLBL					
A446	11.4/97 Doob + Doos					
	21 - drum ul A#49 - relabelled					
4448	ionshorn most drum is A447?					
7441	HILBE HILLIGT Doors + Dores					
A450	12/20/00 Door 200					

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DRUM #	# Descr. of Contents	Vol	Comments	OVA	Samp#	Date
1481	HEAL 2/9/12 Done +Disz					
A 482						
A 483	ash	F	12/28/96	40		
A484						
A485	hand, Studen	F	21997	25	154	5/6/97
A486	asn	1	75	Ø		
A487						
A488	ash	F	4/95	10	155	5/6/17
M481	History boned bone History					<u> </u>
4490	1166 21,9/47 4006 4 0054					
19491						
14492					•	
PA493						
1494	3/25/95 Dood - Dood				·	
A495	agn	1		ϕ		
A496	arn + stuase	F		250	156	5/6/97
19497					<u>-</u>	
1498	studger liquià	12		110		
1499	ash stuck	15		700	-18	
A5.00						
P501	ash + studge	F		400	157	5/47
N502						
11503		F		8	158	5/497
7504	ash	F		220		
11505						
A506	250 4/8/05 Non-con	F		$ \mathcal{P} $		
A507						
1508	asn	3/4		110	159	5/6/97
	no drum					
A510						

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DRUM #	Descr. of Contents	Vol	Comments	OVA	Samp#	Date
4541						
A542	asn + slucist	F		80	165	9/6/97
A543						
A544						
A545	asn + studex	F		460	166	5/0177
P.546		1				
P547	4/95 0006 None					
A548					`	
4A549						
A55c						
A551	ism	1	burner ash - slag 1/49	10		
A552					•	
VA553						
A554						
A555						
A556						
A 557						
£558	am	F		150	167	5/6/97
A559		15		6		,
4560						
7A561						
4 A562						
AS63						
4 4564	ash	F		Ø	168	56/97
19565						
4A5661						
14567 14568 14569 14570						
A568						
YA569						
A 570						

R. V. Hopkins Drum Summary

Davenport, Ia.

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DRUM#	Descr. of Contents	Vo	Comments		OVA	Samp#	Date
A601							1:
A 602							
A 603							
AGUIT	quid	F			950	170	5/6/9
A 605							
A606							•
A607							
12608 a	C		[22 - 10 ROTA				
A610	5n	F	4-9-45 44. 16	Dog	12	176	5/6/9
DIOI			Burner ush	2008			
A612					1	***	
	med + Studge	+				-	
AH4	the st	F			10		
A615							
7616		+					-
A617		+					·
A618		+					
7619		╂╼╌┼					
1620							
4021		1				<u> </u>	
1622		 				<u> </u>	·
1623 USI	\wedge	F	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	D00 6			
1624		 	gardate 4/8/95	100 % 1008 Nave		169 4	6 97
625		 	Suiver tok	Jair 1908			
626							
627							
628							
629		140	Burner Ash	2006 2005		· .	
630			Duines Agh	0005			

R. V. Hopkins Drum Summary Davenport, Ia. TDD: SO7-9704-001 PAN: 0494RVSFXX

·	C. V. Hopkins Diam Summary	Davent	90rt, 18. 1DD: 507-9704-001		APX	^^
DRUM#	Descr. of Contents	Vol	Comments	OVA	Samp#	Date
6001						
(BCC2						
BCC3						
BTC4					,	
BCC5					,	
Book	·					
BCC7	;					
BCC8	arthun dust	F		34C	193	5/7/9
BCC9						
BCID						
BCII	brown iteest	F		ZCC		
13012						
BC13						
13014					~	
BC15 1	aroun dust	3/4		1CC	u.	
B016						
BC17 1	in own dust	F		2000		
BCIS						
	orown clust	F		70		
BCZC	_					
BC21						
BC22 V	eroun clust	F		100		
B023						
	ovenn dust	F		SICC	194	5/7/97
BCZS						
	moun dust	F		Ø		
BC27						
	auid	F	· · · · · · · · · · · · · · · · · · ·	Ø		
	moun dust	FI		10		
B030						

R. V. Hopkins Drum Summary Davenport, Ia. TDD: SO7-9704-001

PAN: 0494RVSFXX

معوض ج د

DRUM#	Descr. of Contents	Vol	Comments	ر معاوضت	OVA	Samp#	Date
BCOI			· · · · · · · · · · · · · · · · · · ·			~ .	
BC62							-
BC63							
BOK4						1	
13065			`			5'	
BC66				-			
PC67						: 5	
BC18						! c	
	rown aust	ī			1		
BC70						. 17	
B171						<u> </u>	
BC72				·		3 J	,
PSC73			 	- 12			
B.74		\perp	·			14	-
18075		1					
BC76		1-1					
BC77							
BC78							
BUTA		-	·				
BC80		-					
BC81 12	nown dust	F			2	<u> </u>	
PSU82							
13033 M	ion dust	F			2	191	5/7/57
BUST		 _ _					
	roun dust	F	·		7C		
	onh dust	F			3		
3088							
15089		1 1					
B090	· · · · · · · · · · · · · · · · · · ·						
1000	······································	<u> </u>					

TDD: S07-9704-001 PAN: 0494RVSFXX

	DRUM #	Descr. o	f Contents	Vol	Comments		OVA	Samp#	Date
X	B121	-							
	B122	proni	aust	F	معادي المنطقة الم		\mathcal{L}		
	P3123					-	•	Marin Carlein Carlein	4 2
X	B124	pronsi	dust	۴	-		_15	196_	51197
X	B125				a company a second of the company				
(B126	moun	dust	1/2	• • •	-	_3		
X	B127	prown	aust	1/2			4_	, we management to the	
X	B128				- · · · · · · · ·				
X	B129								
X	1313C					<u></u>			
.,	B131								
	B132		· 					-	 .
/ /	B133								
⁽]	B134								
ļ	B135				<u> </u>		~·		
X	B136								
λ	BB								
	B138	brein	dust	F			30		
	B139	buch	dust	P			200	<u></u>	
X	B140								
	B141			1-1					<u></u>
,	13142			1					
A	P3143	·		1_1				-, -, -, -, -, -, -, -, -, -, -, -, -, -	
X	B144			$\perp \perp$					
X	B145								
X	B146								
X	1347			1					
1	3148	pron	augr	F			0		
	B141			-					
ΧĮ	P. 150	·							

Charles Pan: 0494RVSFXX

•	-							
	DRUM	# Descr. of Contents	Vol	Comments		OVA	Samp#	Date
×	D001						oamp#	Date
X	D002	Baghouse dust prour	IF			7	144	-1-1-
X	0003	,	34			 	174	5/7/5
>	1004		1-1-			0		
$\sqrt{}$	0005							
X	D006							
, X	10007							
\	D008							
$\overrightarrow{\lambda}$	D009		1-1-					
X	DOIC	brown assor dust	F			12()		
Á	POII	brown ash dust	F			120		
X	DO12					7		
31	DO13	moun as dust	34			Ø		
λ_{F}	D014					φ		
X	DO15							
X	D016							
\times	0017	brown dust	F			2		
	0018							
ΧĹ		monn dust	F			-		
$\not\downarrow$	020					2		
X	DO51							
_	DO22.							
_	D023 k	ash-black	5			7		
1	2024					2		
10	2025							
1	9026							
	0027		_					
< ~ \	028							
	1029							
	030							
		recycled paper recycled paper			ecology and	arvironmen		
		· · · ·			_	_		

R. V. Hopkins Drum Summary Davenport, Ia. TDD: SO7-9704-001

	DRUM #	Descr. of Contents	Vol	Comments	OVA	Samp#	Date
	0031						
	D032						
\langle	12033						
X	4500	brown dust	「「		5	i.	
X	2035						
X	13036	brown dust	F		3	* %;	
λ	12037						
<	D038	brown dust	F	····	70	189	5/7/97
X	D039	brown dust	F		2		
X	D040		1				
X	D041					- 4	
×	D042						· · ·
γ1	D043					·	
òl	DO44					· , 7	
Á	D045						
$\langle \rangle$	12046						····
X	0047					<u> </u>	
Ŋ	D048		+_+				<u>-</u>
	12049	brown dust	F		2		
\ \ !	D050	la con i	+_+	 			
	D051	brown dust	F		2000		
K	12053		++				
	Dust	brown dust	-		3-		<u> </u>
K	12055	DY C + 11 200034	F		20		
	005ib		+				
	13057		+-+				
T	7058	pown do st	F		-}-,-		
ΧI	0059	10001 (22.0)	1-1		- - - 		
Xt	DORO		++				
1,5	1000		4				

TDD: SO7-9704-001

1	DRUM #	Descr. of Contents	Vol	Comments	OVA	Samp#	Date
X	10091						
X	2092	brown dust	F		40		
	DC93	······································					
X	2094	brown dust	F		2		
$ \mathcal{Y} $	D095						
	0096						
	0097	brown dust	F		4		
X	12099		1				
X		brown dust	F		<u> </u>	185	517h
K	1300		-				
신	DOL						
X	M02				 		
. ` 4 . `	M03	0.61	-				
	DIOY DIOS	ash + point	1/2		5		
쉬			++		-		
$\langle \cdot \rangle$	D106 D107	ash	F		100		
7	068	W 57 1	+		Ø		
	0109		+ +				
A	0110		+-+		1		
λ	OIII		+-+		1		
χ	0112						
Y	013	brown dust	F		P		
X	4110						
`	0115	brown dust	F		7		
\setminus	MIL						
XL	LIIQ						
	DII8						
	D119		1_1				
χL	01201]

R. V. Hopkins Drum Summary Davenport, Ia. TDD: SO7-9704-001 PAN: 0494RVSFXX

DRUM #	Descr. of Contents	Vol	Comments	OVA	Samp#	Date
X 0151						
10152						
10153	·					·
X0154						,
× 2155						
X 0150	····					
X 0157	·					
X D159	·		<u> </u>			
10159	brown dust	F	·	5		
X0160						
X0101						
XOIL-	· 					
Vh163	brown aust	F		150	 	
X0164					<u> </u>	
X0165	brown dust	F		01	188	5/7/97
X0166						
10117						
× 108						
>0169						
0170	brown dist	F		1		
X2171						
XD172.			·····			
× 173						
X 0174	bre - west	F	·	4		
X0175						
0176						
0177						
178						
Di 79	· 					
0180	brown dust	=		2	187	51719

R. V. Hopkins Davenport, Iowa TDD: S07-9711-007 PAN: 0687RVSFXX Samp # Drum # Contents Vol OVA Comments Date ,2/16/97 5-00 70 4000 3/4 کے ہاوی Griy 12/16/87 000 gli start am D 00 6 40 12/16/92 003 162 1005 2006 12/16/92 210 1006 3-10-45 005 nais 10 3-18-4 100 t GRE 006 30 0008 210 20 Z D 008 2006 Cio 008 1008 5-18-95 ש מים ע 610 *30*4 0008 0006 Grain 12 010 D008 7 Date invendable
Burner Ash 10006 بعدين 550 011 Doos 1)006 Date unrose (10 Chauks Gray 2008 Date HATERGUILE 2006 GRa 210 D00 B 1/8 100 E Modere 40 3-7-45 A 3/4 6 015 3-21-95 110 016 D006 D008 No date 7/8 Redish 40 017 40 018 0008 plez Waste 4601 No Into would Ľ10 No Info completed Her waste Label 40 skal OLO 2006 4/2/95 410 Cale 021 0008 2006 7-18-45 L10 022 nias Dou 8 <u>Baises</u> 3-22-85 **D**006 023 ahus 15 Door D006 7-17-95 024 icur Don K 2-21-45 -10 025 Dooi Nosite 34 026 Colley (10 DO0 4 1019/96 410 027 I Grav D00 6 1/8 No data 00 018 BETRET 0008 No date 2006 Gian 019 15 Burner 2008

ATTACHMENT 5

Photographic Record



SITE. R. V. Hopkins Inc. Davenport, IA

TDD S07-9711-007 PAN 0687RVSFXX DATE: 12/16/97

TIME. 800 TAKEN BY: E Nold

DIR south ROLL#: 1 FRAME: 1

SUBJECT: Law enforcement vehicles in front of facility



SITE: R V Hopkins Inc Davenport, IA

TDD S07-9711-007 PAN 0687RVSFXX

DATE 12/16/97

TIME: 815 TAKEN BY. E Nold DIR north

ROLL# 1 FRAME 2

SUBJECT Area A, staged drums of waste



SITE R V Hopkins Inc Davenport, IA

TDD: S07-9711-007 PAN 0687RVSFXX

DATE 12/16/97 TIME 1120

TAKEN BY R Claytor DIR north northwest

ROLL# 1 FRAME 3

SUBJECT Area D, Staged drums of waste



SHIP R V Hopkins Inc. Davenport, IA

TDD S07-9711-007 PAN: 0687RVSFXX

DATE 12/16/97 TIME: 1122

TAKENBY R Claytor DIR southwest

ROLL# 1 FRAME 4

SUBJECT Area D, Staged drums of waste



SHF R V Hopkins Inc. Davenport, IA

TDD S07-9711-007 PAN 0687RVSFXX

TIME 1203 DATE: 12 16 97 DIR cast TAKEN BY F. Niermann ROLL# 1 TRAME 7

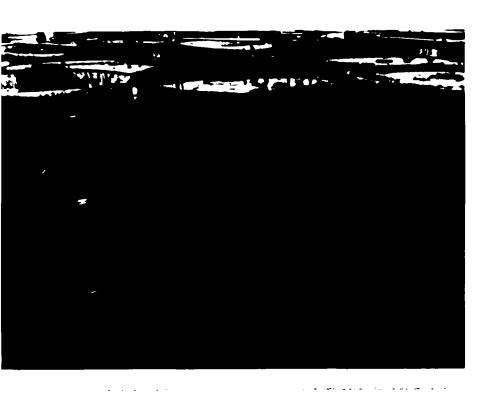
SUBJECT - Drum A033 containing RCRA hazardous waste

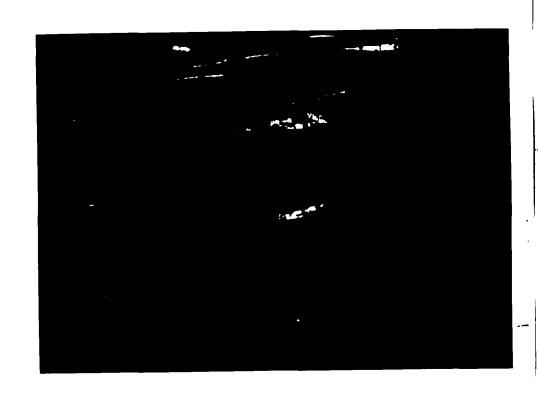


SHIF R V Hopkins Inc. Davenport, IA IDD 807-9711-007 PAN 0687RVSFXX DATE 12 16 97 HMF 1205 TAKINBY I Niermann DIR northeast

ROLL# 1 TRAME 8

SUBJECT Drum A050 containing RCRA hazardous waste





| SIFE | R V Hopkins Inc. Davenport, IA | 1DD | S07-9711-007 | PAN | 0687RVSEXX | DATE | 12 16 97 | TIME | 1208 | DIR | east | FRAME | 10 | SUBJECT | Data | Societain | RAME | 10 | Containing | Co



SHE R V Hopkins Inc. Davenport, IA

IDD S07-9711-007 PAN 0687RVSFXX

DATE 12/16/97 TIME 1209

TAKEN BY F Niermann DIR southwest

ROLL# 1 FRAME 11

SUBJECT Drum A337 containing RCRA hazardous waste



SHF R V Hopkins Inc. Davenport, IA

1DD S07-9711-007 PAN 0687RVSEXX

DATE 12 16 97 HME 1211

TAKENBY F Niermann DIR southeast

ROLL# 1 FRAME 12

SUBJECT Drun A143 containing RCRA hazardous waste



SHE R V Hopkins Inc. Davenport, IA

| TDD | 807-9711-007 | PAN | 0687RVSEXX

DATE 12 16 97 HMF 1213

TAKEN BY T. Niermann DIR east

ROLL# | TRAME 13

SUBJECT - Drum A165 containing RCRA hazardous waste



SHE R V Hopkins Inc. Davenport, IA

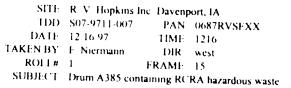
1DD S07 9711-007 PAN 0687RVSEXX

DATE 12 16 97 11ME 1214 DIR west TAKENBY F Niermann

1RAMI 14 ROLL# 1

SUBJECT Drum A252 containing RCRA hazardous waste







SITE. R. V. Hopkins Inc. Davenport, IA

TDD S07-9711-007 PAN 0687RVSFXX

DATE 12 16 97 TIME 1217

TAKEN BY F Niermann DIR . southwest

ROLL# 1 FRAME 16

SUBJECT Drum A364 containing RCRA hazardous waste



SITE R V Hopkins Inc. Davenport, IA

IDD 807-9711-007 PAN 0687RVSFXX

| DATI | 12 16 97 | HMF | 1220 | | 1AK1 N BY | F Niermann | DIR | northeast

ROLL# 1 FRAMI 18

SUBJECT Drum A564 containing RCRA hazardous waste



SHE R V Hopkins Inc. Davenport, IA

1DD 807 9711-007 PAN 0687RVSFXX

DATE 12 16 97 HMI 1231

TAKEN BY T. Niermann DIR southwest

ROLL# 1 FRAME 20

SUBJECT | Drum A462 containing RCRA hazardous waste





SITE R V Hopkins Inc Davenport, IA

| TDD | S07-9711-007 | PAN | 0687RVSFXX | DATE | 12 16 97 | TIME | 1233

TAKEN BY F Niermann
ROLL# 1
CTIME 1232
DIR southwest
FRAME 21

SUBJECT Drum A604 containing RCRA hazardous waste

SITE: R. V. Hopkins Inc. Davenport, IA

IDD 807-9711-007 PAN 0687RVSFXX

DATE 12 16:97 TIME 1233
TAKENBY F Niermann DIR northeast

ROLL#. 1 FRAME 22

SUBJECT Drum (09 comaining RCRA pararoous waste-



SHE R V Hopkins Inc. Davenport, IA

1DD 807-9711-007 PAN 0687RVSEXX

HMF 1330 DATE 12 16 97 DIR west

TAKLN BY 1 Niermann FRAME 23

ROLL# 1 SUBJECT Drum A623 containing RCRA hazardous waste



SHIF R V Hopkins Inc. Davenport, IA

1DD \$67.9711-007 PAN 0687RVSEXX

HMF 1340 DA1E 12 16 97 DIR north

LAKINBY I Niermann FRAME 24 ROLL# 1

SCBJFC1 Drum A430 containing RCRA hazardous waste



SITE R. V. Hopkins Inc. Davenport, IA

TDD S07-9711-007 PAN: 0687RVSFXX

TIME: 1342 DATE: 12-16/97

TAKEN BY F Niermann DIR northeast

FRAME 25 ROLL# 1

SUBJECT Drum A071 containing RCRA hazardous waste



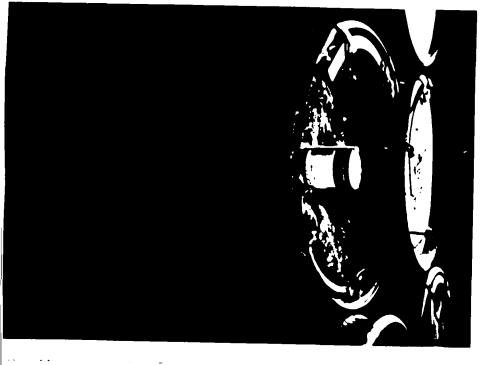
SITE R V Hopkins Inc Davenport, IA

TDD S07-9711-007 PAN 0687RVSEXX

DATE: 12-16-97 HMI: 1443 TAKEN BY O Onyango DIR west

ROI I # 1 FRAME 26

SUBJEC1 Drum AKXX5001 and sample



SHF R V Hopkins Inc. Davenport, IA 1DD 807-9711-007 PAN 0687RVSFXX HMF 1445 DA11 12 16 97 DIR west TAKEN BY O Onyango FRAME 27 ROLL# 1 SUBJECT Drum AKXX5002 and sample



SHE R V Hopkins Inc. Davenport, IA

1DD S07-9711-007 PAN 0687RVSFXX

TIME 1446 DATE: 12:16:97

DIR west TAKI N BY O Onyango

ROLL# 1 TRAME 28

SUBJECT Drum AKXX5003 and sample



SITE R V Hopkins Inc Davenport, IA

TDD S07-9711-007 PAN 0687RVSFXX

DATE: 12/16/97 TIME 1447

DIR northwest TAKENBY O Onyango

ROLL# 1 FRAME 29

SUBJECT Drum AKXX5004 and sample



SITE R V Hopkins Inc. Davenport, IA

PAN 0687RVSFXX TDD S07-9711-007

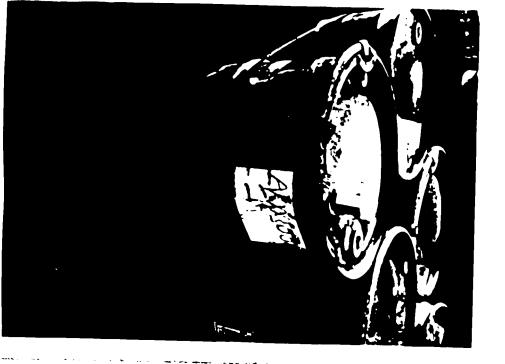
TIME 1447 DA11: 12/16/97

DIR west TAKEN BY O Onyango

FRAME 30 ROLL# 1

SUBJECT Drum AKXX5005 and sample collected

0



SHIP R V Hopkins Inc. Davenport, IA

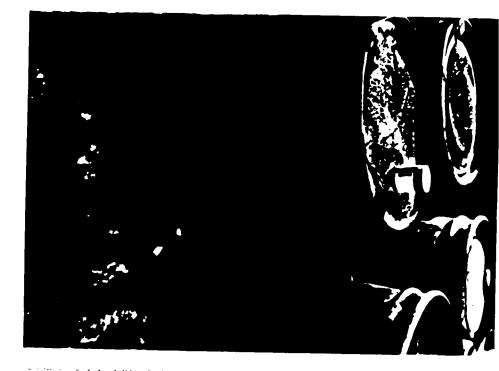
PAN 0687RVSFXX IDD S07-9711-007

TIME 1448 DATE 12/16/97

TAKEN BY O Onyango DIR west

FRAME 31 ROLL# 1

SUBJECT Drum AKXX5006 and sample collected from it



SHE R V Hopkins Inc. Davenport, IA

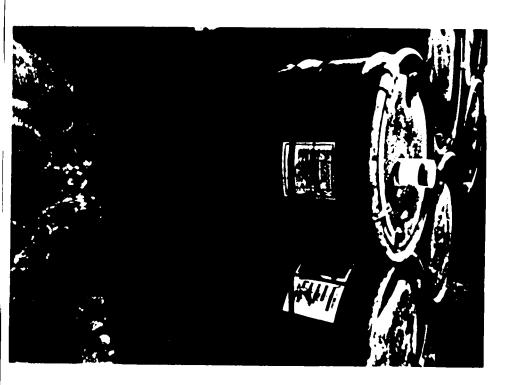
IDD S07-9711-007 PAN 0687RVSFXX

TIME 1448 DATE 12/16/97

TAKENBY O Onyango DIR west

ROLL# 1 FRAME 32

SUBJEC1 Drum AKXX007 and the sample collected from it



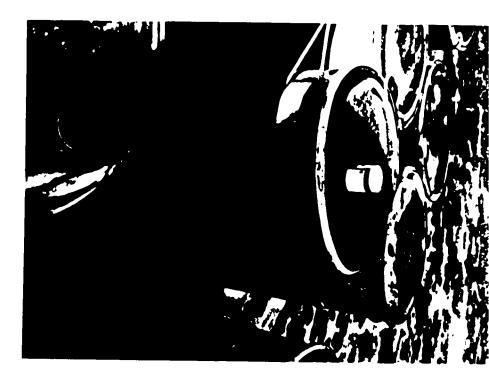
SITE R V Hopkins Inc Davenport, IA

IDD S07-9711-007 PAN 0687RVSFXX

DATE 12 16 97 TIME 1449

TAKENBY O Onyango DIR west ROLL# 1 FRAME 33

SUBJECT Drum AKXX5008 and sample collected from it



SITE R V Hopkins Inc Davenport, IA

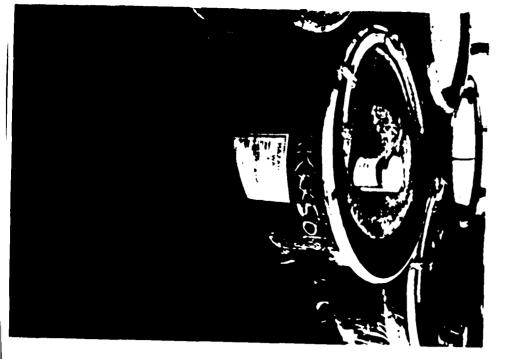
IDD 807-9711-007 PAN 0687RVSFXX

DATE 12 16 97 TIME 1450

TAKEN BY O Onyango DIR east

ROLL# | FRAME 34

SUBJECT Drum AKXX5009 and sample collected from it



SHE R V Hopkins Inc. Davenport, IV

PAN 068 RVSEXA 1DD 8079711007

HME 1451 DATE 12 16 97

TAKENBY O Onyango DIR southeast

TRAME 38 ROLL# 1

SUBJECT Drum AKXXS010 and sample collected from it



SHI - R. V. Hopkins Inc. Davenport, IA

PAN 068 RVSEXX IDD 807 971 007

HM1 1451 DAH 12 16 97

DIR northeast TAKEN BY O Onyango

FRAME 36 ROLL# 1

SUBJECT Drum AKXXS011 and sample collected tro-





SHF R V Hopkins Inc. Davenport, IA IDD 807 9711 007 PAN 0687RVSEXX

DATE 12 16 97 HML 1454

TAKEN BY O Onyango DIR cast

ROLL# 2 FRAME 1

SUBJEC1 Drum AKXX012 and sample collected fro-

SHE R V Hopkins Inc. Davenport, IA

IDD 807 9711 007 PAN 068 RVSEXX DAIL 12 16 97

HME 4456

TAKLNBY O Onyango DIR west

ROLL# 2 LRAMI 2

SUBJECT Drum AKXX8013 and the sample collected





TDD 807 9711 007 PAN 068 'RVSLXX

DATE 12 16 97 TIME 1457

TAKEN BY O Onyango DIR west

ROTT# 2 FRAME 3

SUBJECT - Drum AKXX8014 and sample collected from it.



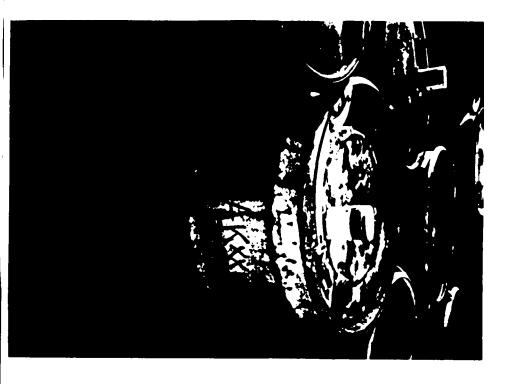
SHI R V Hopkins Inc. Davenport, IV

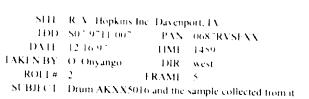
TDD 807 9711 007 PAN 0687RVSLXX

DATE 12 16 9 HML 1458 TAKEN BY O Onvango DIR west

ROLL# 2 FRAML 4

SUBILCT - Drum AKXX018 and the sample collected from it







| SHE R V Hopkins Inc Davenport, IA | TDD | 807-9711-007 | PAN | 0687RVSEXX | DAH | 12-16-97 | HML | 1489

DATE 12 16 92 HMI 1489 TAKEN BY O Onyango DIR west

ROLL# 2 FRAMI 6

SUBIFCT Drum AKXX5017 and the sample collected





- PAN - 068 RVSLXX UDD 807 9711 007

HMI 1459 DXII 12 16 9

TAKEN BY O Onvango DIR west

TRAMI ROLL# 2

SUBJECT: Drum AKXXS018 and the sample collected



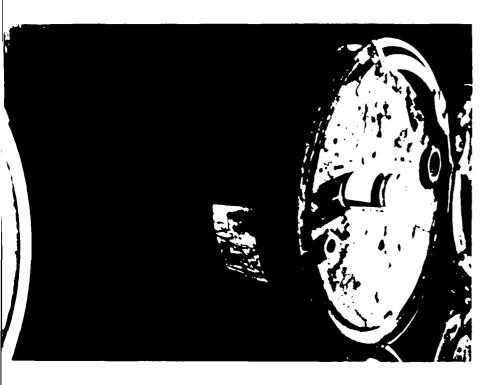
SHI R V Hopkins Inc. Davenport, IA PAN 0687RVSEXX

1DD 807.9711-007 11M1 1500

DAH 12 16 92 DIR west TAKINBY O Onyango

TRAME 8 ROLL# 2

SUBJECT Drum AKXXS019 and the sample collected





TDD 807-9711 007 PAN 0687RVSEXX

DATE 12 16 97 HML 1500

TAKEN BY O Onyango DIR west

ROLL# 2 FRAME 9

SUBJECT Drum AKXX5020 and samples collected from it



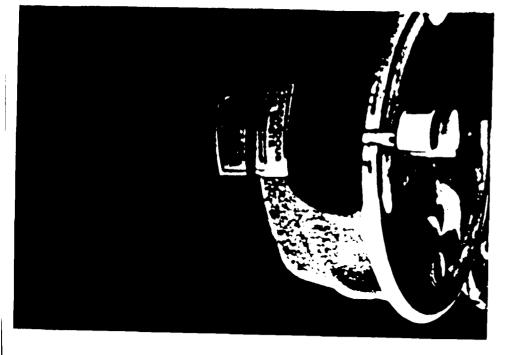
SHE R V Hopkins Inc. Davenport, IX

[DD] 807-9711-007 PAN -0687RVSEXX

DATE 12 16 9? TIME 1802 TAKEN BY O Onyango DIR northeast

ROLL# 2 FRAMI 10

SUBJECT Drum AKX5021 and the sample collected from it



SHE R V Hopkins Inc. Davenport, IV

 $\frac{1}{PAN} \frac{1}{0687RVSEXX}$ TDD 807-9711-007

HMI 1503 DATE 12 16 97

DIR east

TAKINBY O Onyango TRAME 11

ROLL# 2

SUBJECT Drum AKXX5022 and the sample collected from it



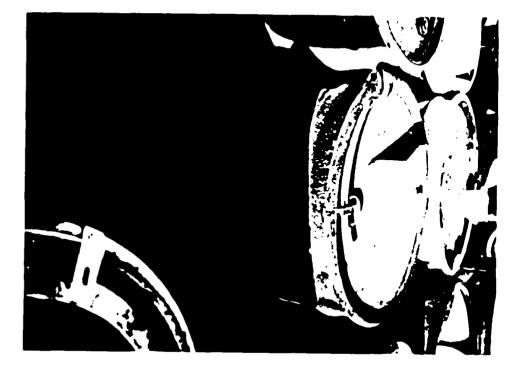
| STIF | R. V. Hopkins Inc. | Davenport, IA | TDD | S07-9711-007 | PAN | 0687RVSEXX TDD S07-9711-007

HMF 1503 DA11: 12 16 97 DIR cast TAKEN BY O Onyango

TRAME 12 ROLL# 2

SUBJECT Drum AKXX5023 and the sample collected





SHE R V Hopkins Inc. Davenport, IA

1DD S07 9711 007 PAN 0687RVSEXX

DATI 12 16 97 HMF 1504

TAKI N BY O Onyango DIR northeast

ROLL# 2 FRAME 13

SUBJECT Drum AKX5024 and the sample collected f

SIII R V Hopkins Inc. Davenport, IA

1DD 807 9"11 00" PAN 068 RVSEXX

DATE 12 16 97 HME 1808

TAKEN BY O Onyango DIR cast

ROI1# 2

FRAME 14

SUBJECT Drum AKXX5025 and the sample collected



SHF R V Hopkins Inc. Davenport, IA

1DD 807-9711-007 PAN 0687RVSEXX

DATE 12 16 97 HMF 1506

TAKEN BY O Onyango DIR northeast

ROLL# 2 TRAMI 15

SUBJECT Drum AKXX5026 and the sample collected from it



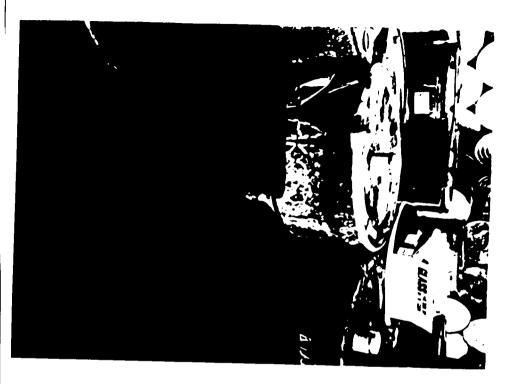
SIII R V Hopkins Inc. Davenport, IV

1DD S07.9711-007 PAN 0687RVSLXX

11MF 1506 DATE 12 16 97 TAKEN BY O Onyango DIR northcast

FRAME 16 ROLL# 2

SUBJECT Drum AKXX5027 and the sample collected from it





SHF R V Hopkins Inc. Davenport, IA

IDD 807-9711-007 PAN 0687RVSEXX

| DA1F | 12 16 97 | HM | 1806 | | TAKEN BY | O Onyango | DIR | cast | | ROLL# | 2 | FRAME | 17

SUBJEC1 Drum AKXX5028 and the sample collected from it

SITE R V Hopkins Inc. Davenport, IA

IDD 807-9711-007 PAN 0687RVSFXX

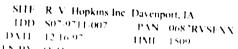
DATE 12 16 97 HMF 1507

TAKEN BY O Onyango DIR east

ROLL# 2 FRAME 18

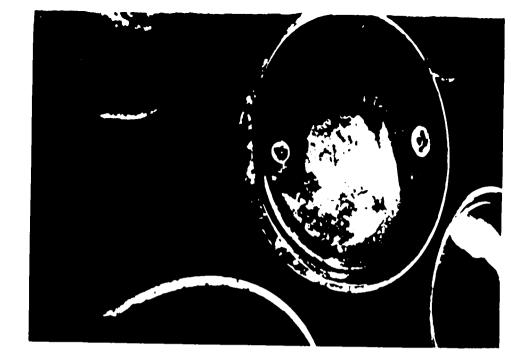
SUBJECT Drum AKXX5029 and the sample collected





TAKEN BY O Onvango DIR northwest ROI1# 2

TRAMI 19 SUBJECT - Drum D165 containing RCRA hazardous w



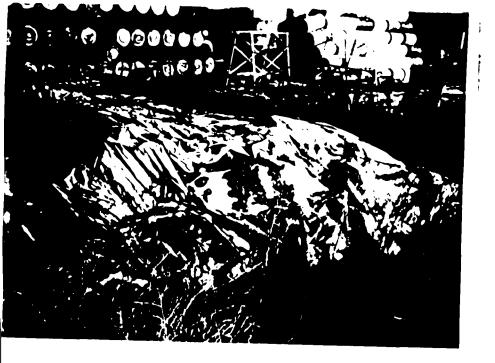
SHI R A Hopkins Inc. Davenport, IA

PAN 0687RVSEXX TDD - 807 9711 007

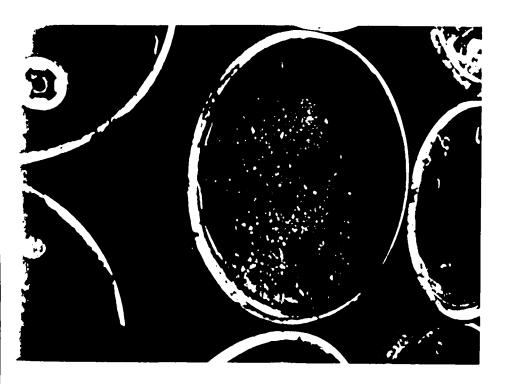
HMI: 1510 DAH 12 16 97 DIR west TAKINBY O Onyango

FRAMI 20 ROLL# 2

SUBJECT Drum D071 containing RCRA hazardous w







SHE R V Hopkins Inc. Davenport, IA

1DD S07-9711-007 PAN 0687RVSFXX

DATE 12 16 97 HMF 1512 TAKEN BY O Onyango DIR west

ROLL# 2 FRAME 21 SUBJECT Drum D099 containing RCRA hazardous waste



ATTACHMENT 6

Field Sheets and Chain of Custody Forms

CHAIN OF CUSTODY RECORD ENVIRONMENTAL PROTECTION AGENCY REGION VII

ACTIVITY LEADER(Print) HAVE OF SI						URVEY OR ACTIVITY					DATE OF COLLECTION 7 SHEET 1 OF 2		
	ENTS OF SHIP	V. 110F	1100					DAY MONTH YEAR (W					
100 - 1 NAME OF META									RECEIVING ABORATORY				
SAMPLE SUBITAINER BOTTLE SUTT					BOTTLE VOA SET 12 VIALS EA) PPLE NUMBER			sed ment	other				
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CHAIN OF CUSTODY RECORD ENVIRONMENTAL PROTECTION AGENCY REGION VII

ACTIVITY LEADER(Print) NAME OF S KUDLINSKI R.N. He						SURVEY OR ACTIVITY					DATE OF COLLECTION	7 SHEET 1 01 2		
CONTENTS OF SHIPMENT										<u>_</u>	DRUMMEN WASTE			
SAMPLE SCA							1 1		12 VI		RECE . NG LABORATORY			
i	NUMBER	CUBITAINER	BOTTLE BOTTLE BO			VOA SET					MEMARRS Ulfreit REGRMATION (condition of samples upon receipt other sample fumbers, etc.)			
AK	XX5-001				1	CARDEA	++	X	" "		TCLP METAL	5 519		
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} <u></u> '	ICE CHEST	S: OTHER _				———COURIER ———SAMPLER CONVEYED					(SHIPPING DOOLYENT NUMBER			
PERS(DINEL CUSTO	DY RECORD				<u> </u>					(6			
	QUISHED B'		DATE	TIME	- 1	RECEIVED BY					REASON FOR CHAN	GE OF CUSTODY		
.//	eur F-76				L	7.554.50								
LAP	GUISHED BY	UNSEALE	DATE	TIME		SEALED RECEIVED BY		INSE	ALE	οL	REASON FOR CHAN	GE OF CUSTODY		
	LED QUISHED BY	UNSEALE	DATE	Tire		SEALED . UNSEALED				0	REASON FUR CHAN	GE OF COSTOLY		
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-	. 6 :	UNSEAL	FOH		-	SEALED		UNS	EALS		1			

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115 FY. 98 ACTNO: AKXX5 SAMNO: OO | QCC: MEDIA: SOIL PL: KUDLINSKI ACTIVITY DES: K.V. HAPKIND

LOCATION: DAVENPORT, IOWA PROJECT NUM: PT: LONGITUDE:

ANALYSIS REQUESTED:

CONTAINER GLASS & oz.

NAME

PRESERVATIVE MGP ICE Y°C

SIQ TCLP METALS, NO Hg

COMMENTS: FOR SUPERFUND ONLY: SUBSITE IDENTIFIER:___ OPERABLE UNIT:___

NO DRUM HAZARDOUS WASTE LABEL

CIRAY SOLIC 1/2 50% FULL

7

FIELD SHEET

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII
ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115

F) 00 10min 4		2.42.TO	N RD. :	CANSAS C	ITY. KS	66115	
FY: 98 ACTNO: AKXX5 SAMNO: 002	QCC:		EA & SOIL		KUDLINS		
ACTIVITY DES: R.V. HAPKINS LOCATION: DAVENFORT, IOWA	 PRC	JECT		REF	LATITUD LONGITU)E:	
SAMPLE DES: DRUM # AKXX5002 LOCATION: CASE/BATCH/SMO:/_/ STORET/AIRS NO:/_/	LAB:		BEG: END:	DATE / / / / / / / / / / / / / / / / / / /	TIME	FROM R	
ANALYSIS REQUESTED: CONTAINER PRESERVATIVE GLASS & oz. ICE 4°C	MGP S19	NAME TCL		ALS, No		DOWN:	
COMMENTS: FOR CURRENT					J		

COMMENTS: FOR SUPERFUND ONLY: SUBSITE IDENTIFIER: ___ OPERABLE UNIT: ___

NO HAZHICOUS WASTE LABEL ON GRUM CONTAINS GRAY SOLIO 75% FULL

JORAFT

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII

ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115

FY 9B ACTNO: AKXX5 SAMNO: 003 QCC: MEDIA: SOIL PL: KUDLINSKI

ACTIVITY DES: R.V. HOPKINS
LOCATION: DAVENFORT, IOWA PROJECT NUM: PT: LONGITUDE:

SAMPLE DES: DRUM # AKXXS & PROJECT NUM: PT: LONGITUDE:

SAMPLE DES: DRUM # AKXXS & DATE TIME FROM REF PT
LOCATION:
CASE/BATCH/SMO: LAB: BEG: DATE TIME FROM REF PT
CASE/BATCH/SMO: LAB: END: 12/16/97 13:40 NORTH:
DOWN:

ANALYSIS REQUESTED:
CONTAINER PRESERVATIVE MGP NAME
GLASS & et. ICE 4°C SIQ TCLP METALS, NO Hg

COMMENTS: FOR SUPERFUND ONLY: SUBSITE IDENTIFIER: OPERABLE UNIT:

DRUM CONTAINS GRAY/&ROWN SOLID

DOOF, DOOS

HAZARDOUS WASTE LABEL

"BURNER ASH" DOGE, DOG8

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115 FY 99 ACTNO: AKXX5 SAMNO: DOY QCC: MEDIA: SOIL PL: KUDLINSKI ACTIVITY DES: R.V. HOPKINS LOCATION: DAVENFORT, IOWA PROJECT NUM: REF LATITUDE: SAMPLE DES: DRUM # AKXX5004 SAMPLE DES: DKUM # AKXX5CC4

LOCATION:

CASE/BATCH/SMO:

STORET/AIRS NO:

DATE TIME FROM REF PT

EAST:

END: 12/16 97 13:45 NORTH: ANALYSIS REQUESTED: CONTAINER PRESERVATIVE MGP NAME
GLASS & oz. ICE 4°C SI9 TCLP METALS, NO Hg COMMENTS: FOR SUPERFUND ONLY: SUBSITE IDENTIFIER: ___ CPERABLE UNIT: ___ DRUM CONTAINS GRAY/BROWN SOLIR 10070 FULL HAZAROOMS WASTE LABEL ACCUMULATION START PATE 2/14/95

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII
ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115

FY. 3 ACTNO: AKXX5 SAMNO: 005 QCC: MEDIA: SOIL PL: KUDLINSKI

ACTIVITY DES: K.V. HOLKING
LOCATION: DAVENPORT, IOWA PROJECT NUM: PT: LONGITUDE:

SAMPLE DES: DRUM # AKXX5005

LOCATION:

CASE/BATCH/SMO:

LAB:

END: 12/16/97/13:50 NORTH:

DOWN: TIME FROM REF PT
EAST:

ANALYSIS REQUESTED:

CONTAINER PRESERVATIVE MGP NAME
GLASS & oz. ICE 4°C SIQ TCLP METALS, NO Hg

COMMENTS: FOR SUPERFUND ONLY: SUBSITE IDENTIFIER: ___ OPERABLE UNIT: ___

DRUM CONTAINS GRAY/BROWN SOLIO 100 76 FOLL

HAZARROWS WASTE LAREL ACCOMPLATION START DATE 3/16/95 "BURNER ALH" DOOG DOOR

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115 FY. 3@ ACTNO: AKXX5 SAMNO: 006 QCC: MEDIA: SOIL PL: KUDLINSKI ACTIVITY DES: R.V. HAPKINS LOCATION: DAVENFORT, IOW4 PROJECT NUM: REF LATITUDE: SAMPLE DES: DRUM # AKXXSOCK # AKXXSccc DATE TIME FROM RI

BEG: DATE TIME FROM RI

END: 12/16/97 13:55 NORTH: FROM REF PT CASE/BATCH/SMO: STORET/AIRS NO: ANALYSIS REQUESTED.
CONTAINER PRESERVATIVE
TICE Y°C MGP NAME GLASS & OZ. ICE 4°C SIQ TCLP METALS, NO Hg COMMENTS: FOR SUPERFUND ONLY: SUBSITE IDENTIFIER: ___ OPERABLE UNIT: ___ DRUM CONTAINS CITAT/BROWN SOLIO 10570 FULL HAZARROUS WASTE LABEL ACCUMULATION START BATE 3-28-95 BURNER ASH" DODG DODS

FIELD SHEET

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII
ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY

77		- 	N RD. K	CANSAS CIT	TY, KS	66115	
FY. 98 ACTNO: AKXX5 SAMNO: 007 ACTIVITY DES: R.V. HOPKINS	QCC:	MEDI	A: SOIL		CUDLINS		
LOCATION: DAVENFORT, IOWA	₽RC	DJECT	NUM:	REF L	ATITUD ONGITU	E:	
SAMPLE DES: DRUM # AKXX5007 LOCATION: CASE/BATCH/SMO:/_/	LAB:		BEG: END:	DATE 12/16/73	TIME	FROM REF	 ?T
ANALYSIS REQUESTED: CONTAINER PRESERVATIVE GLASS 8 01. ICE 4°C	MGP SIq	NAME TCL	-P MET	ALS. N'a		DOWN:	_

COMMENTS: FOR SUPERFUND ONLY: SUBSITE IDENTIFIER: ___ OPERABLE UNIT: ___

DRUM CONTAINS CALY/BROWN BOLLS DOTS FULL

HAZERDERS WASTE LABEL ACCOMPLATION START NATE 4-2-95

"BIRNER 48H" DOOG, DOOB

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115 FY. 95 ACTNO: AKXX5 SAMNO: 008 QCC: MEDIA: SOIL PL: KUDLINSK! ACTIVITY DES: R.V. HAPKINS LOCATION: DAVENFORT, IOWA PROJECT NUM: PT: LONGITUDE: SAMPLE DES: DRUM # AKXX5003 SAMPLE DES: DRUM # AKXX5003

LOCATION:

CASE/BATCH/SMO:

STORET/AIRS NO:

DATE TIME FROM REF PT

EAST:

END: 12/16/97 14:05 NORTH: ANALYSIS REQUESTED: CONTAINER PRESERVATIVE MGP NAME GLASS & OI. ICE 4°C SIQ TCLP METALS, NO Hg COMMENTS: FOR SUPERFUND ONLY: SUBSITE IDENTIFIER: ___ OPERABLE UNIT: ___ DRUG CONTAUS GRAT SOLID (DO TO FULL HAZTABOUS WASTE LABEL, NO ACCOMULATION START DATE 1622NIZ AST" DOOG, DOOR

FIELD SHEET U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115 FY. JO ACTNO: AKXX5 SAMNO: OOQ QCC: MEDIA: SOIL PL: KUDLINSKI ACTIVITY DES: R.V. HOPKINS ACTIVITY DES: K.V. 1101 KMZ

LOCATION: DAVENPORT, IOWA PROJECT NUM: PT: LONGITUDE: SAMPLE DES: DRUM # 4Kxxsccq

LOCATION:

CASE/BATCH/SMO:

STORET/AIRS NO:

DATE TIME FROM RE
EAST:
EAST:
END: 12/16/97 19:10 NORTH:
DOWN: TIME FROM REF PT ANALYSIS REQUESTED: CONTAINER PRESERVATIVE MGP NAME
GLASS & oz. ICE 4°C SIQ TCLP METALS, NO Hg COMMENTS: FOR SUPERFUND ONLY: SUBSITE IDENTIFIER: OPERABLE UNIT: DROW CONTAINS (247/ FROME) SOLID 100% FULL HAZAROCUS WASTE LABEL ACCUMILATION START WILL 5-18-95

"BURNER 200" DOCK, DEC 8

FIELD SHEET

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII
ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115 FY. 98 ACTNO: AKXX5 SAMNO: 010 QCC: MEDIA: SOIL PL: KUDLINSKI ACTIVITY DES: R.V. HAPKINS ACTIVITY DES: R.V. HAPKINS

LOCATION: DAVENPORT, IOWA PROJECT NUM: PT: LONGITUDE:

SAMPLE DES: DRUM # 4 KXX5010

LOCATION:

CASE/BATCH/SMO: DATE TIME FROM REF PT

CASE/BATCH/SMO: EAST:

STORET/AIRS NO: END: 12/16/97 14:15 NORTH:

COWN: ANALYSIS REQUESTED: CONTAINER PRESERVATIVE MGP NAME
GLASS 8 02. ICE 4°C SIQ TCLP METALS, NO Hg

COMMENTS: FOR SUPERFUND ONLY: SUBSITE IDENTIFIER: OPERABLE UNIT:

DRUM CONTAINS GRAY SOLIO 7/8 FULL ACCOMULATION START DATE 96 P "BURNEL ASH" DOOG, DOOS

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII

ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115

FY. 96 ACTNO: AKXX5 SAMNO: OIL QCC: MEDIA: SCIL PL: KODLINSKI

ACTIVITY DES: R.V. HAPKINS
LOCATION: DAVENFORT, IOW4 PROJECT NUM: REF LATITUDE:

SAMPLE DES: DRUM # AKXX5011 PT: LONGITUDE:

CASE/BATCH/SMO: DATE TIME FROM REF PT
CASE/BATCH/SMO: BEG: DATE TIME FROM REF PT
CASE/BATCH/SMO: LAB: BEG: DATE TIME FROM REF PT
CASE/BATCH/SMO: LAB: BEG: DOWN:

ANALYSIS REQUESTED:
CONTAINER PRESERVATIVE MGP NAME
GL-SS 6 oz. ICE 4°C S19 TCLP METALS, NO H9

DEON CONTRINS CRATSON 1/8 FULL

HAZARON WASTE LABEL

COMMENTS: FOR SUPERFUND CNLY: SUBSITE IDENTIFIER: ___ OPERABLE UNIT: ___

ACCUMULATION START DATE, NOT PRILENT

Busines Ash" Doos, Doos

FIELD SHEET

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115

	FY. 99 ACTNO: AVAILABLE COM	. 25 FUNSTON RD. KANSAS CITY, KS 66115
	ACTIVITY DES. P. V. H. BILL	QCC: MEDIA: SOIL PL: KUDLINSKI
	LOCATION: DAVENFORT, IOWA SAMPLE DES: DRUM # 4KXK5012	PROJECT NUM: REF LATITUDE: PT: LONGITUDE:
	CASE/BATCH/SMO:/STORET/AIRS NO:/	DATE TIME FROM REF PT LAB: BEG:
	ANALYSIS REQUESTED: CONTAINER PRESERVATIVE GLASS & or. ICE 4°C	MGP NAME SIQ TCLP METALS, NO HQ
(COMMENTS: FOR SUPERFUND ONLY:	SUBSITE IDENTIFIER: OPERABLE UNIT:

DROM COUTINS GRAY SOLIO 7/8 FULL HAZITACOUS WASTE LABEL ACCOMPLETION START DATE NOT READABLE "Biener ASH" DOOP DOOR

FIELD SHEET
U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115 FY. 98 ACTNO: AKXX5 SAMNO: 013 QCC: MEDIA: SOIL PL: KUDLINSKI ACTIVITY DES: R.V. HOPKINS ACTIVITY DES: K.V. HOPKIND
LOCATION: DAVENFORT, IOWA PROJECT NUM: PT: LONGITUDE: SAMPLE DES: DRUM # AKXX5013

LOCATION:

CASE/BATCH/SMO: | / | LAB: BEG: | / | EAST:

END: 12/16/77 14:25 NORTH: ANALYSIS REQUESTED: PRESERVATIVE MGP NAME

ICE 4°C SI9 TCLP METALS, NO Hg CONTAINER
GLASS & oz. COMMENTS: FOR SUPERFUND ONLY: SUBSITE IDENTIFIER: OPERABLE UNIT: DRAM CONTAINS GRAY SOCIO 10070 FOLL HAZARIONA WATTE LAGEL ACCOMPLATION START DATE NET REALABLE " BUP WEIL 87" 0006, DEE8

, ,

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII

ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115

FY: #8 ACTNO: AKXX5 SAMNO: 014 QCC: MEDIA: SOIL PL: KODLINSK!

ACTIVITY DES: R.V. HOPKINS
LOCATION: DAVENFORT, IOWA PROJECT NUM: REF LATITUDE:

SAMPLE DES: DRUM # AKX5014 PROJECT NUM: PT: LONGITUDE:

LOCATION: DAVENFORT, IOWA PROJECT NUM: PT: LONGITUDE:

SAMPLE DES: DRUM # AKX5014 DATE TIME FROM REF PT
CASE /BATCH/SMO: LAB: END: 12/16/73 H: MORTH:

STORET/AIRS NO: LAB: END: 12/16/73 H: MORTH:

CONTAINER PRESERVATIVE MGP NAME
GLASS & oz. ICE 4°C S19 TCLP METALS, NO Hg

COMMENTS: FOR SUPERFUND CNLY: SUBSITE IDENTIFIER: OPERABLE UNIT:

DRUM CONTAINS GRAT/RIWN SULIN 7/8 FULL
HAZIRIUM WASTE LABEL
"BURUEL MA" DOGG, DICK

ACCUMULATION START RATE UNREADEDLE

FIELD SHEET

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII
ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115 FY: 98 ACTNO: AKXX5 SAMNO: 015 QCC: MEDIA: SOIL PL: KUDLINSKI ACTIVITY DES: R.V. HAPKINS LOCATION: DAVENFORT, IOWA PROJECT NUM: PT: LONGITUDE: SAMPLE DES: DRUM # AKKKSOIS # 4|(<<
 LAB:
 BEG:
 DATE TIME FROM REF PT
 EAST:
 END:
 12/16/97/14:57 NORTH:
 DOWN: CASE/BATCH/SMO: STORET/AIRS NO: ANALYSIS REQUESTED: CONTAINER PRESERVATIVE MGP GLASS & oz. NAME ICE Y°C SI9 TCLP METALS, NO HO COMMENTS: FOR SUPERFUND ONLY: SUBSITE IDENTIFIER: ___ OPERABLE UNIT: ___ DRUM CONTAINS CRAY SOLIO 3/4 FULL HAZHEDOUS WASTE LABEL ALCUMULATION START DATE 3/7/95 " BURNER ASH"

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII FIELD SHEET ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115 FY. 98 ACTNO: AKXX5 SAMNO: 016 QCC: MEDIA: SOIL PL: KUDLINSKI ACTIVITY DES: R.V. HOPKINS LOCATION: DAVENPORT, IOW4 PROJECT NUM: REF LATITUDE: SAMPLE DES: DRUM # AKXX5016 # AKXX5016

BEG: DATE TIME FROM RE
END: 12/16/97 14: 40 NORTH:
DOWN: TIME FROM REF PT CASE/BATCH/SMO: STORET/AIRS NO: ANALYSIS REQUESTED: CONTAINER PRESERVATIVE MGP ICE Y°C NAME SI9 TCLP METALS, NO Hg COMMENTS: FOR SUPERFUND ONLY: SUBSITE IDENTIFIER: ___ OPERABLE UNIT: ___

DRIOM CONTAINS GRAY/SOLID 7/4 FULL
HAZAROUS WASTE LABEL
ACCOMULATION START DATE 3-21-95
BARDEL ATT

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII

ENVIRONMENTAL SERVICES DIV	FIELD SHEET PROTECTION AGENCY, RE 25 FUNSTON RD. KANSA	EGION VII
ACTIVITY DEC. O. V. N. O.	QCC: MEDIA: Soil	PL: KUDLINSKI
LOCATION: DAVENFORT, IOWA SAMPLE DES: DRUM # 4KXX5C17		REF LATITUDE:
CASE/BATCH/SMO:/	BEG: /	ATE TIME FROM REF PT : EAST: NORTH:
ANALYSIS REQUESTED: CONTAINER PRESERVATIVE		DOWN:
TCE 4%	SIQ TCLP METALS	No Hg
FOR SUPERFUND ONLY:	SUBSITE IDENTIFIER:	_ OPERABLE UNIT:

DRUM CONTAINS GRAY/SOLID 7/8 FULL HAZAROOUS WHATE LABOL NO ACCOMULATION START BATE "BURNER 750" Dook, Doo's

JRAFT

J.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII

ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115

FY: 98 ACTNO: AKXX5 SAMNO: 016 QCC: MEDIA: SOIL PL: KUDLINSKI

ACTIVITY DES: R.V. HOPKINS

LOCATION: DAVENFORT, IOWA PROJECT NUM: PT: LONGITUDE:

SAMPLE DES: DRUM #AKX5018

LOCATION: DATE TIME FROM REF PT

CASE/BATCH/SMO: DATE TIME FROM REF PT

CASE/BATCH/SMO: LAB: BEG: J: EAST:

STORET/AIRS NO: LAB: END: 12/16/93 H: 50 NORTH:

DOWN:

ANALYSIS REQUESTED:

CONTAINER PRESERVATIVE MGP NAME

GLASS & ot. ICE 4°C SIQ TCLP METALS, No Hg

COMMENTS: FOR SUPERFUND ONLY: SUBSITE IDENTIFIER: OPERABLE UNIT:

DRUM CONTAINS GRAY/RED SOLID 3/4 FULL

HAZARIOUS WASTE LABEL

ALLUMITATION START DATE 7-18-95

BURNIA ASH" DOOG, COOP

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII FIELD SHEET

ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115 FY. 98 ACTNO: AKXX5 SAMNO: 019 QCC: MEDIA: SOIL PL: KUDLINSKI ACTIVITY DES: R.V. HAPKINS LOCATION: DAVENFORT, IOW4 PROJECT NUM: REF LATITUDE:
SAMPLE DES: DRUM # AND ACTION SAMPLE DES: DRUM # AKXX5019 A # AKxxsola

DATE TIME FROM REF PT

BEG: ________ :_ EAST:
END: 12/16/77 14:55 NORTH:
DOWN. CASE/BATCH/SMO: STORET/AIRS NO: ANALYSIS REQUESTED: ANALYSIS REQUESTED:
CONTAINER PRESERVATIVE MGP NAME
GLASS & oz. ICE 4°C SIQ TCLP METALS, NO Hg DOWN: COMMENTS: FOR SUPERFUND ONLY: SUBSITE IDENTIFIER: ___ OPERABLE UNIT: ___

DRUM CONTAINS GRAY SOLIA 10070 FULL

HAZMITOLS WASTE LABEL

NO TUFO FORNSTED ON LABEL

FIELD SHEET U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115

	23 1035 UN RD. KI	ANCAC CERT	
FY. 98 ACTNO: AKXX5 SAMNO: 020	OCC: MEDIA	ANSAS CITY, KS 66115	-
	MED PAT SOIL	PL: KUDLINSKI	
LOCATION: DAVENFORT, IOWA	PROJECT NUM:	REF LATITUDE: PT: LONGITUDE:	_
SAMPLE DES: DRUM # AKXX5020			-
CASE/BATCH/SMO:/_/	LAB: BEG: END:	DATE TIME FROM REF PT ===================================	-
ANALYSIS REQUESTED:		DOWN:	-

CONTAINER GLASS & oz.

PRESERVATIVE

MGP

ICE Y°C

519 TCLP METALS, NO Hg

COMMENTS: FOR SUPERFUND ONLY: SUBSITE IDENTIFIER: ___ OPERABLE UNIT: ___

DRUM COSTAINS GRAT SOLIR 100-70 FOLL

HAZARIOUS WITHTE LABEL TO NO INFO COMPLETED ON LABEL

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII
ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115 FY. 98 ACTNO: AKXX5 SAMNO: 021 QCC: MEDIA: SCIL PL: KUDLINSKI ACTIVITY DES: R.V. HOPKINS

LOCATION: DAVENFORT, IOWA PROJECT NUM: REF LATITUDE: SAMPLE DES: DRUM # AKXX502'

LOCATION: TIME FROM REF PT CASE/BATCH/SMO: STORET/AIRS NO: DOWN:

ANALYSIS REQUESTED:

CONTAINER PRESERVATIVE MGP
GLASS & oz. ICE Y°C S19

SIQ TCLP METALS, NO Hg

COMMENTS: FOR SUPERFUND ONLY: SUBSITE IDENTIFIER: ___ OPERABLE UNIT: ___

DRUM CONTAINS GRAY SOLID 100% FULL

HAZARCOUS WASTE LABEL ALLUMBERTOD START DATE 4/2/95 "BETWER ASH" Dock, Dock

FIELD SHEET U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115 FY. 98 ACTNO: AKXX5 SAMNO: 02Z QCC: MEDIA: SOIL PL: KUDLINSK! ACTIVITY DES: R.V. HOPKINS LOCATION: DAVENFORT, IOWA PROJECT NUM: PT: LONGITUDE: SAMPLE DES: DRUM # AKXXS022 # AKXXS032

DATE TIME FROM RE
BEG: _________ EAST:
END: 12/16/97 15:10 NORTH:
DOWN: TIME FROM REF PT CASE/BATCH/SMO: STORET/AIRS NO: ANALYSIS REQUESTED: DOWN: CONTAINER PRESERVATIVE
GLASS & OI. ICE 4°C MGP Sig TCLP METALS, NO Hg COMMENTS: FOR SUPERFUND CNLY: SUBSITE IDENTIFIER: ___ OPERABLE UNIT: ___

DRUM COUTAINS GRAY SOLID 100% FULL

HAZZZOOUS WATE CABEL -- ACCUMULATION START DATE 7/18/15

BURNER 457" DOOD, DOOS

FIELD SHEET U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115 FY. 98 ACTNO: AKXX5 SAMNO: 023 QCC: MEDIA: SOIL PL: KUDLINSKI ACTIVITY DES: R.V. HAPKINS LOCATION: DAVENFORT, IOW4 PROJECT NUM: PT: LONGITUDE: SAMPLE DES: DRUM # AKXX5023 SAMPLE DES: DRUM # AKXX5023

LOCATION:

CASE/BATCH/SMO:

STORET/AIRS NO:

LAB:

DATE TIME FROM RE
EAST:
END: 12/16/77/15:15 NORTH: TIME FROM REF PT ANALYSIS REQUESTED: CONTAINER PRESERVATIVE MGP
GLASS 8 oz. ICE 4°C S19 NAME TCLP METALS, NO Ha COMMENTS: FOR SUPERFUND ONLY: SUBSITE IDENTIFIER:___ OPERABLE UNIT:___ DRUM CONTAINS LIREY SOLID 7/8 FULL HAZZEROSUS WESTE LEGEL ACCUMULATION STAIT BATE 3-22-95 "BURNEL ASH" DOOG, DOOR

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII FIELD SHEET ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115 FY 98 ACTNO: AKXX5 SAMNO: 024 QCC: MEDIA: SOIL PL: KUPLINSKI ACTIVITY DES: R.V. HOPKINS ACTIVITY DES: K.V. MO KING
LOCATION: DAVENFORT, IOW4 PROJECT NUM: PT: LONGITUDE: SAMPLE DES: DRUM # AKXX5024 BEG: DATE TIME FROM RE

LAB: BEG: 12/16/97 15: 20 NORTH:

DOWN: LOCATION: CASE/BATCH/SMO: TIME FROM REF PT STORET/AIRS NO: ANALYSIS REQUESTED: CONTAINER PRESERVATIVE MGP
GLASS 8 oz. ICE 4°C S19 NAME TCLP METALS, NO HO SI9 COMMENTS: FOR SUPERFUND ONLY: SUBSITE IDENTIFIER:___ OPERABLE UNIT:___

DRUM COUTAINS GRAY SOLID 7/8 FULL

HAZZACION WASTE LABEL ACCUMULATION STAIT RATE 7/17/95" ELENER ASH" DOOF, DOOR

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115 FY. 38 ACTNO: AKXX5 SAMNO: 025 QCC: MEDIA: SOIL PL: KUDLINSK! ACTIVITY DES: R.V. HAPKINS
LOCATION: DAVENFORT, IOWA PROJECT NUM: PT: LONGITUDE: SAMPLE DES: DRUM # AKXX5025

LOCATION:

CASE/BATCH/SMO:

LAB:

END: 12/16/97 15:25 NORTH:

DOWN:

ANALYSIS REQUESTED:

CONTAINER PRESERVATIVE MGP NAME
GLISS 8 oz. ICE 4°C SIQ TCLP METALS, NO Hg

COMMENTS: FOR SUPERFUND ONLY: SUBSITE IDENTIFIER: ___ OPERABLE UNIT: ___

DRUM CONTAINS GRAY SOLID 100% FOLL

HAZARDON, WASTE LABEL

ACCUMULATION START DATE 2-21-95

"BURNER ASH"

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII

ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115

FY. 19 ACTNO: AKXX 5 SAMNO: 026 QCC: MEDIA: SCIL PL: KODLINSK!

ACTIVITY DES: R.V. HAPKINS
LOCATION: DAVENFORT, IOW 4 PROJECT NUM: REF LATITUDE:

SAMPLE DES: DRUM # AKXXS036

LOCATION: DAVENFORT, IOW 4 PROJECT NUM: PT: LONGITUDE:

CASE/BATCH/SMO: DATE TIME FROM REF PT
CASE/BATCH/SMO: DATE TIME FROM REF PT
CASE/BATCH/SMO: LAB: BEG: 12 IL 37 IS: 30 NORTH:

STORET/AIRS NO: LAB: BEG: TIME FROM REF PT
CASE/BATCH/SMO: DOWN:

ANALYSIS REQUESTED:
CONTAINER PRESERVATIVE MGP NAME
GLASS & or. ICE 4°C SIQ TCLP METALS, NO Hg

COMMENTS: FOR SUPERFUND ONLY: SUBSITE IDENTIFIER: OPERABLE UNIT:

DRUM CONTAINS GRAY SOLID 3/4 FULL

HAZAZBOUR WASTE LABEL, NO ACCOMPLATION START DATE

"BURNER ASH" DOOK DOOS

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII
ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115 FY. 98 ACTNO: AKXX5 SAMNO: 027 QCC: MEDIA: SOIL PL: KUDLINSKI ACTIVITY DES: R.V. HOPKINS SAMPLE DES: DRUM # A KX15027 LOCATION: FROM REF PT CASE/BATCH/SMO: STORET/AIRS NO: ANALYSIS REQUESTED: CONTAINER PRESERVATIVE MGP NAME GLASS & oz. ICE Y°C SI9 TCLP METALS, NO Hg COMMENTS: FOR SUPERFUND ONLY: SUBSITE IDENTIFIER: ___ OPERABLE UNIT: ___ DRUM CONTAINS DARK GRAY SOLID 100% FOLL

HASILGOUS WASTE LABEL

ALLUAS-AFIEN START DATE 10/9/96 "ASH"

NO OTHER INFO ON LABEL

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115 FY. 38 ACTNO: AKXX5 SAMNO: 028 QCC: MEDIA: SOIL PL: KUDLINSKI ACTIVITY DES: R.V. MG. R.W. LOCATION: DAVENFORT, IOW 4 PROJECT NUM: PT: LONGITUDE: SAMPLE DES: DRUM # AKXX5038

LOCATION:

CASE/BATCH/SMO:

LAB:

END: 12/16/97 15: 40 NORTH:

DOWN: TIME FROM REF PT ANALYSIS REQUESTED: CONTAINER PRESERVATIVE MGP
GLASS 8 oz. ICE 4°C S19 NAME SIQ TCLP METALS, NO HO COMMENTS: FOR SUPERFUND ONLY: SUBSITE IDENTIFIER: ___ OPERABLE UNIT: ___

DRUM CONTAINS BLACK/REC/GRAY SOLIR 7/8 FULL

HAZZAROUS GATTE LABEL

NO ACCUMULATION START DATE

"a-ine: 751- " Cook, Doog

IPLE COLLECTED BY : JIM KUDLINSKI, EFA CSC

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII

ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115 99 ACTNO: AKXX5 SAMNO: 029 QCC: MEDIA: SOIL PL: KUDLINSKI ACTIVITY DES: R.V. HAPKINS LOCATION: DAVENFORT, IOWA PROJECT NUM: REF LATITUDE: SAMPLE DES: DRUM # AKXX5034

LOCATION:

CASE/BATCH/SMO:

LAB:

END: 12 16 97 5: 45 NORTH:

DOWN: TIME FROM REF PT ANALYSIS REQUESTED: CONTAINER PRESERVATIVE MGP NAME ICE Y°C GLASS Bozi SIQ TELP METALS, NO Hg COMMENTS: FOR SUPERFUND ONLY: SUBSITE IDENTIFIER: OPERABLE UNIT:

DRUM CONTAINS GART SOLD

Listations waste which NO ACCUMULATION START DATE Marine 1-55" Doob, 3223

AMPLE COLLECTED BY : JIM KUDLINSKI, EFA OSC

ATTACHMENT 7 Analytical Data

ANALYSIS REQUEST REPORT

LABORATORY APPROVED DATA PROJECT LEADER APPROVAL PENDING

FOR ACTIVITY: AKXX5

LARSON, KEVIN

02/20/98 14:58:21

ALL REAL SAMPLES AND FIELD Q.C.

* LABO APPROVED

FY: 98 ACTIVITY: AKXX5

DESCRIPTION: R.V. HOPKINS

LOCATION: DAVENPORT

IOWA

STATUS: ACTIVE

TYPE: SAMPLING - IN HOUSE ANALYSIS

PROJECT: L30

LABO DUE DATE IS 2/15/98. INSPECTION DATE: 12/16/97 REPORT DUE DATE IS 3/16/98.

ALL SAMPLES RECEIVED DATE: 12/17/97

ALL DATA APPROVED BY LABO DATE: 02/18/98

FINAL REPORT TRANSMITTED DATE: 00/00/00

EXPECTED LABO TURNARGUND TIME IS 60 DAYS EXPECTED REPORT TURNARGUND TIME IS 90 DAYS

ACTUAL LABO TURNAROUND TIME IS 63 DAYS

ACTUAL REPORT TURNAROUND TIME IS O DAYS

SITE CODE: X5 SITE: R.V. HOPKINS

SAMP NO.	асс н	DESCRIPTION	SAMPLE STATUS		STATE	AIRS/ STORET LAY- BEG. LOC NO SECT ER DATE	BEG. TIME	END. DATE	END. Time
001	S	NO DRUM HAZARDOUS WASTE LABEL	1	DAVENPORT	IOWA	12/16/97	13:30	12/16/97	13:30
002	S	NO DRUM HAZARDOUS WASTE LABEL	1	DAVENPORT	IOWA	12/16/97	13:35	12/16/97	13:35
003	S	HAZARDOUS WASTE LABEL-DCO6 & DOO8	1	DAVENPORT	IOWA	12/16/97	13:40	12/16/97	13:40
004	S	HAZ. WASTE LABEL-DOOG & DOOB/BURNER	ASH 1	DAVENPORT	IOWA	12/16/97	13:45	12/16/97	13:45
005	S	HAZ.WASTE LABEL-DOOG & DOOB/BURNER		DAVENPORT	IOWA	12/16/97	13:50	12/16/97	13.50
006	S	HAZ.WASTE LABEL-DOO6 & DOOB/BURNER		DAVENPORT	IOWA	12/16/97	13:55	12/16/97	13:55
007	S	HAZ.WASTE LABEL-DOO6 & DOOB/BURNER	ASH 1	DAVENPORT	IOWA	12/16/97	14:00	12/16/97	14:00
008	S	HAZ. WASTE LABEL-DOOG & DOOB/BURNER	ASH 1	DAVENPORT	IOWA	12/16/97	14:05	12/16/97	14:05
003	S	HAZ.WASTE LABEL-DOOG & DOOB/BURNER	ASH 1	DAVENPORT	IOWA	12/16/97	14:10	12/16/97	14:10
010	S	HAZ. WASTE LABEL-DOOG & DOOB/BURNER	ASH 1	DAVENPORT	IOWA	12/16/97	14:15	12/16/97	14:15
011	Ş	HAZ. WASTE LABEL-DOOG & DOOB/BURNER		DAVENPORT	IOWA	12/16/97	14:15	12/16/97	14:15
012	Ş	HAZ. WASTE LABEL-DOOG & DOOS/BURNER	ASH 1	DAVENPORT	IOWA	12/16/97	14:20	12/16/97	14:20
013	S	HAZ. WASTE LABEL-DOOG & DOOS/BURNER	ASH 1	DAVENPORT	IOWA	12/16/97	14:25	12/16/97	14:25
014	S	HAZ. WASTE LABEL-DOOG & DOOS/BURNER	ASH 1	DAVENPORT	IOWA	12/16/97	14:30	12/16/97	14:30
015	S	HAZ. WASTE LABEL-DOOG & DOOS/BURNER	ASH 1	DAVENPORT	IOWA	12/16/97	14.35	12/16/97	14:35
016	S	HAZ. WASTE LABEL-DOOG & DOOS/BURNER	ASH 1	DAVENPORT	IOWA	12/16/97	14:40	12/16/97	14:40
017	S	HAZ. WASTE LABEL-DOOG & DOOS/BURNER	ASH 1	DAVENPORT	IOWA	12/16/97	14:45	12/16/97	14:45
018	S	HAZ. WASTE LABEL-DOOG & DOOB/BURNER	ASH 1	DAVENPORT	IOWA	12/16/97	14:50	12/16/97	14:50
019	S	HAZ. WASTE LABEL-NO INFO. FURNISHED	1	DAVENPORT	IOWA	12/16/97	14:55	12/16/97	14:55
020	S	HAZ. WASTE LABEL-NO INFO. COMPLETED	1	DAVENPORT	IOWA	12/16/97	15:00	12/16/97	15:00
021	S	HAZ. WASTE LABEL-DOOG & DOOB/BURNER	ASH 1	DAVENPORT	IOWA	12/16/97	15:05	12/16/97	15:05
022	S	HAZ. WASTE LABEL-DOOG & DOOB/BURNER	ASH 1	DAVENPORT	IOWA	12/16/97	15:10	12/16/97	15:10
023	S	HAZ.WASTE LABEL-DOO6 & DOO8/BURNER	ASH 1	DAVENPORT	AWOI	12/16/97	15:15	12/16/97	15:15

AMP.						AIRS/			,	
No ucc	н	DESCRIPTION	SAMPLE		ATE	STORÉT LAY- BE LOC NO SECT ER DA	G. NTE	BEG. TIME	END. DATE	END. Time
025 026 027 028 029	S S S	HAZ. WASTE LABEL-DOO6 & DOO8/BURNER HAZ. WASTE LABEL-DOO6 & DOO8/BURNER HAZ. WASTE LABEL-DOO6 & DOO8/BURNER HAZ. WASTE LABEL-NO OTHER INFO.ON LHAZ. WASTE LABEL-DOO6 & DOO8/BURNER HAZ. WASTE LABEL-DOO6 & DOO8/BURNER	ASH 1 ASH 1 ABEL 1 ASH 1	DAVENPORT IOU DAVENPORT IOU DAVENPORT IOU DAVENPORT IOU DAVENPORT IOU DAVENPORT IOU	A A A	12/1 12/1 12/1 12/1 12/1	6/97 6/97 6/97	15:25 15:30 15:35 15:40	12/16/97 12/16/97 12/16/97 12/16/97 12/16/97 12/16/97	15:30 15:35 15:40

```
SAMPLE INFORMATION:
                                                                       ANALYTICAL RESULTS/MEASUREMENTS INFORMATION:
                                                                       COMPOUND = MGP (MEDIA-GROUP-PARAMETER) CODE AND NAME OF
SAMP. NO. = SAMPLE IDENTIFICATION NUMBER (A 3-DIGIT NUMBER
              WHICH IN COMBINATION WITH THE ACTIVITY NUMBER
                                                                                  THE MEASURED CONSTITUENT OR CHARACTERISTIC
              AND QCC. PROVIDES AN UNIQUE NUMBER FOR EACH SAMPLE
                                                                                  OF EACH SAMPLE
              FOR IDENTIFICATION PURPOSES)
                                                                                = SPECIFIC UNITS IN WHICH RESULTS ARE REPORTED:
                                                                       UNITS
            = QUALITY CONTROL CODE (A ONE-LETTER CODE USED TO
QCC
                                                                                        = CENTIGRADE (CELSIUS) DEGREES
              DESIGNATE SPECIFIC QC SAMPLES. THIS FIELD WILL BE BLANK FOR ALL NON-QC OR ACTUAL SAMPLES):
                                                                                  CFS = CUBIC FEET PER SECOND
GPM = GALLONS PER MINUTE
              B = CAL INCREASED CONCENTRATION FOR A LAB SPIKED DUP SAMPLE
                                                                                  IN
                                                                                        = INCHES
                                                                                  I.D. = SPECIES IDENTIFICATION
              D = MEASURED VALUE FOR FIELD DUPLICATE SAMPLE
              F = MEASURED VALUE FOR FIELD BLANK
                                                                                       = KILOGRAM
                                                                                  KG
              G = MEASURED VALUE FOR METHOD STANDARD
                                                                                        = LITER
              H = TRUE VALUE FOR METHOD STANDARD
                                                                                  LB
                                                                                        = POUNDS
              K = CAL INCREASED CONCENTRATION FOR FIELD SPIKED DUP SAMPLE
                                                                                        = MILLIGRAMS (1 x 10-3 GRAMS)
                                                                                  MG
              L = MEASURED VALUE FOR A LAB DUPLICATE SAMPLE
                                                                                  MGD = MILLION GALLONS PER DAY
              M = MEASURED VALUE FOR LAB BLANK
                                                                                  MPH = MILES PER HOUR
              N = MEASURED CONCENTRATION OF FIELD SPIKED DUPLICATE
                                                                                  ΗV
                                                                                        = MILLIVOLT
              P = MEASURED VALUE FOR PERFORMANCE STANDARD
                                                                                 H/F = MALE/FEMALE
              R = CAL INCREASED CONCENTRATION RESULTING FROM LAB SPIKE
                                                                               m2
                                                                                       = SQUARE METER
                                                                                     = CUBIC METER
              S = MEASURED CONCENTRATION OF LAB SPIKED SAMPLE
                                                                                 M 3
              T = TRUE VALUE OF PERFORMANCE STANDARD
                                                                                 NA
                                                                                       = NOT APPLICABLE
              W = MEASURED CONCENTRATION OF LAB SPIKED DUPLICATE
                                                                                       = NANOGRAMS (1 X 10-9 GRAMS)
                                                                                 NG
                                                                                 NTU - NEPHELOMETRIC TURBIDITY UNITS
             Y = MEASURED CONCENTRATION OF FIELD SPIKED SAMPLE
              Z = CAL INCREASED CONCENTRATION RESULTING FROM FIELD SPIKE
                                                                              PC/L = PICO (1 \times 10-12) CURRIES PER LITER
              1 = MEASURED VALUE OF FIRST SPIKED REPLICATE
                                                                                 PG = PICOGRAMS (1 x 10-12 GRAMS)
              2 = MEASURED VALUE OF SECOND SPIKED REPLICATE
                                                                                 P/CM2 = PICOGRAMS PER SQUARE CENTIMETER
              3 = MEASURED VALUE OF THIRD SPIKED REPLICATE
                                                                                SCH = STANDARD CUBIC METER (1 ATH, 25 C)
              4 = MEASURED VALUE OF FOURTH SPIKED REPLICATE
                                                                                SQ FT = SQUARE FEET
             5 = MEASURED VALUE OF FIFTH SPIKED REPLICATE
                                                                                        = STANDARD UNITS (PH)
                                                                                 SU
              6 = MEASURED VALUE OF SIXTH SPIKED REPLICATE
                                                                                       = MICROGRAMS (1 X 10-6 GRAMS)
              7 = MEASURED VALUE OF SEVENTH SPIKED REPLICATE
                                                                                  UMHOS = MICRONHOS/CM (CONDUCTIVITY UNITS)
            = MEDIA CODE (A ONE-LETTER CODE DESIGNATING THE MEDIA
                                                                                  U/CC2 = MICROGRAMS PER 100 SQUARE CENTIMETERS
              OF THE SAMPLE):
                                                                                  U/CM2 = MICROGRAMS PER SQUARE CENTIMETER
                                                                                  1000G = 1000 GALLONS
              A = AIR H = HAZARDOUS WASTE/OTHER
             S = SOLID (SOIL, SEDIMENT, SLUDGE)
T = TISSUE (PLANT & ANIMAL)
                                                                                  +/- = POSITIVE/NEGATIVE
                                                                                        = NUMBER
              W = WATER (GROUND WATER, SURFACE WATER, WASTE WATER,
                                                                       DATA QUALIFIERS - SPECIFIC CODES USED IN CONJUNCTION WITH
                 DRINKING WATER)
                                                                                  DATA VALUES TO PROVIDE ADDITIONAL INFORMATION
DESCRIPTION = A SHORT DESCRIPTION OF THE LOCATION WHERE SAMPLE WAS
                                                                                  ON THE REPORTED RESULTS, OR USED TO EXPLAIN
              COLLECTED
                                                                                  THE ABSENCE OF A SPECIFIC VALUE:
AIRS/STORET LOC. NO. = THE SPECIFIC LOCATION ID NUMBER OF EITHER OF
                                                                                  BLANK = IF FIELD IS BLANK, NO REMARKS OR
                      THESE NATIONAL DATABASE SYSTEMS, AS APPROPRIATE
                                                                                          QUALIFIERS ARE PERTINENT. FOR FINAL
DATE/TIME INFORMATION = SPECIFIC INFORMATION REGARDING WHEN THE SAMPLE
                                                                                          REPORTED DATA, THIS MEANS THAT THE
                       WAS COLLECTED
                                                                                          VALUES HAVE BEEN REVIEWED AND FOUND
                        BEG. DATE = DATE SAMPLING WAS STARTED
                                                                                          TO BE ACCEPTABLE FOR USE.
                        BEG. TIME * TIME SAMPLING WAS STARTED
                                                                                I = INVALID SAMPLE/DATA - VALUE NOT REPORTED
                       END DATE = DATE SAMPLING WAS COMPLETED
                                                                              J = THE ASSOCIATED NUMERICAL VALUE IS AN
                       END TIME = TIME SAMPLING WAS COMPLETED
                                                                                      ESTIMATED QUANTITY
                        NOTE: A GRAB SAMPLE WILL CONTAIN ONLY BEG.
                                                                                K = ACTUAL VALUE OF SAMPLE IS < VALUE REPORTED
                              DATE/TIME
                                                                                L = ACTUAL VALUE OF SAMPLE IS > VALUE REPORTED
                              A TIMED COMPOSITE SAMPLE WILL CONTAIN
                                                                                M = DETECTED BUT BELOW THE LEVEL OF REPORTED
                             BOTH BEG AND END DATE/TIME TO DESIGNATE
                                                                                      VALUE FOR ACCURATE QUANTIFICATION
                              DURATION OF SAMPLE COLLECTION
                                                                                 O = PARAMETER NOT ANALYZED
OTHER CODES
                                                                                 U = THE MATERIAL WAS ANALYZED FOR, BUT WAS NOT
              V = VALIDATED
                                                                                      DETECTED. THE ASSOCIATED NUMERICAL VALUE
```

IS THE SAMPLE DETECTION LIMIT.

ACTIVITY: 8-AKXX5

сом	POUND UNIT	s 00)1	002		003		004		005	
SM46 SILVER, TCLP	: HG/L	0.0100	- υ	0.0100	U	0.0100	U	0.0100	U	: : 0 . 0100	: U :
SM47 ARSENIC, TCLP	MG/L	0.0500) U	:0.0500	U	0.0500	U	0.0500	U	:0.0500	: U :
SM48 BARIUM, TCLP	:MG/L	0.228	U	:0.284	U	0.766	U	2.06		:2.74	- : :
SH49 CADMIUM, TCLP	:MG/L	0.0050) U	0.0051		0.0206		0.0181		:0.0054	:
SM50 CHROMIUM, TCLP	:MG/L	0.156		0.0177		0.0513		0.224		: 4.93	: :
SM51 LEAD, TCLP	MG/L	1.14		:0.0500	U	67.5		: 48.7		:0.245	:
SM52 SELENIUM, TCLP	MG/L	0.0500	υ υ	:0.0500	U	0.0591		0.0542		:0.0500	: U :
ZZO1 SAMPLE NUMBER	: NA	001		:005		003		004		:005	:
2202 ACTIVITY CODE	; N A	AFXX5		PXX4A		AFXX5		: A F X X 5	· - - - · -	: A F X X 5	:

ANALYSIS REQUEST DETAIL REPORT ACTIVITY: 8-AKXX5

COMPOUND	STINU	006		007		800		009		010	
M46 SILVER, TCLP	:MG/L	0.0100	 U	0,0100	u	:0.0100	 υ	:0.0100		0.0100	U :
M47 ARSENIC, TCLP	MG/L	0.0500	υ	0.0500	U	:0.0500	U	:0.0500	U :	0.0500	U :
M48 BARIUM, TCLP	MG/L	0.523	U	2.55		0.452		:1.23	:	1.37	
H49 CADMIUM, TCLP	:MG/L	0.0062	:	0.0050	U	0.0050	บ	:0.0675	:	G.0121	:
MSO CHROMIUM, TCLP	MG/L	0.151		0.0504		0.223		0.233	:	0.0736	
MIST LEAD, TCLP	MG/L	54.6	:	19 0		4.30		.7.89	:	1.94	:
MS2 SELENIUM, TCLP	MG/L	0.0531		0.0500	U	:0.0500	U	0.0500	υ :	0.0500	U :
CO1 SAMPLE NUMBER	: NA	006	;	007		:008		:009	:	010	:
762 ACTIVITY CODE	: na	: AFXX5	:	AFXX5		: AKXX5		: :AFXX5	: :	AFXXS	·:

ACTIVITY: 8-AKXX5

COMPOUND	SIINU	011		012		013		014		015	
SM46 SILVER, TCLP	:: : MG/L	0.0100	 U	0.0100	 U	0.0100	u	0.0100	U	0.0100	U
SM47 ARSENIC, TCLP	: MG/L :	0.0500	υ	:0.0500	U	0.0500	U	0.0500	บ	0.0500	U
SM48 BARIUM, TCLP	:MG/L :	1.39	~	1.54		0.747		1.09		1.16	
SM49 CADMIUM, TCLP	: MG/L :	0.0698		0.0312		0.0050	U	0.0510		0.0734	
SMSO CHRONIUM, TCLP	MG/L	0.144		0.391		0.232		0.102		:0.328	
SMS1 LEAD, TCLP	:MG/L :	2.22		20.4		2.67		:28.4		:29.5	
SM52 SELENIUM, TCLP	: MG/L :	0.0500	U	:0.0500	U	0.0500	U	:0.0530		:0.0500	U
2201 SAMPLE NUMBER	: NA :	011		:012		013		:014		:015	
ZZO2 WCLINITA CODE	: fl A	AKXX5		: AKXX5		: AKXX5		: AFXXS		: AKXX5	

ACTIVITY: 8 AKXX5

COMPOU	מדואט מא	016		017		018		019		020	
SM46 SILVER, TCLP	:MG/L	0.0100	U :	0.0100	: U :	0.0100	υ	:0.0100	U	0.0100	u
SM47 ARSENIC, TCLP	MG/L	0.0500	U	0.0500	U	0.0500	U	:0.0500	U	:0.0500	U
SM48 BARIUM, TCLP	MG/L	1.39		1.94	:	6.68		:0.911		1.49	
SH49 CADMIUM, TCLP	: MG/L	0.0121		0.0312	:	0.0773		:0.0199		:0.0882	
SM50 CHROMIUM, TCLP	HG/L	0.125		14.6	:	9.49		:0.0729		:0.170	
SM51 LEAD, TCLP	: MG/L	:16.5		0.0585	:	1.42		1.46		25.3	
SM52 SELENIUM, TCLP	: MG/L	0.0500	U	0.0500	U :	0.0500	U	0.0500	U	:0.0500	U
2201 SAMPLE NUMBER	: NA	:016		017		018		:019		:020	
7702 ACTIVITY CODE	: NA	A N X X 5		AKXX5		AKXX5		: AKXX5		:AKXX5	

ACTIVITY: 8-AKXXS

C	DNPOUND	UNITS	021		022		023		024		025	
SM46 SILVER, TCLP		MG/L	0.0100	-	0.0100	U	:0.0100		: : : 0 . 0100	U	:0.0100	 U
SH47 ARSENIC, TCLP		MG/L	0.0500	U	:0.0500	U	:0.0500	 U	:0.0500	U	:0.0500	U
SM48 BARIUM, TCLP		MG/L	0.864		0.516		:1.44		:2.92		:3.26	
SM49 CADMIUM, TCLP		MG/L	0.0097		0.0050	u	:0.0893		:0.0927		:0.0806	
SM50 CHROHIUM, TCLP		MG/L	0.140		:0.271		:0.479		:0.376		:0.0665	
SM51 LEAD, TCLP		MG/L	103		0.526		:23.1		:17.3		:1.30	
SM52 SELENIUM, TCLP		MG/I	0 0801		0.0500	U	:0.0500	U	:0.0500	U	:0.0500	Ū
ZZO1 SAMPLE NUMBER	;	NA :	021		:022		:023		:024		:025	
1105 VCLINILA CODE	:	NA :	: AFXX5		: : AKXX5		: :AKXX5		:~ :AKXX5		:	

ACTIVITY: 8-AKXX5

	COMPOUND	UNITS	026		027		028		029			
SM46 SILVER, TCLP		:MG/L	0.0100	U :	0.0100	U	0.0100	U	0.0100	u	:	:
SM47 ARSENIC, TCLP		:MG/L	0.0500	U	0.0500	U	0.0500	U	0.0500	υ	: :	:
SM48 BARIUM, TCLP		:MG/L	2.19		1.55		0.465	U	0.720	U	:	
SH49 CADMIUM, TCLP		MG/L	0.0410		0.0291		0.0050	U	0.0050	U	:	
SM50 CHROMIUM, TCLP		:MG/L	1.30		0.189		0.100		0.0943		:	
SM51 LEAD, TCLP		MG/L	85.6		84.0		3.49		:1.97		:	:
SM52 SELENIUM, TCLP		:MG/L	0.0815		0.0745		0.0500	U	0.0500	U	:	
ZZO1 SAMPLE NUMBER		: NA	026		027		028		029		:	:
ZZOZ ACTIVITY CODE		: 11 A	AKXX5		AKXX5		: AKXX5		: AKXX5		:	:

ACTIVITY AKXX5 R.V. HOPKINS

THE PROJECT LEADER SHOULD CIRCLE ONE - STORET, AIRS, OR ARCHIVE.

CIRCLE ONE: STORET AIRS

ARCHIVE

DATA APPROVED BY LABO FOR TRANSMISSION TO PROJECT LEADER ON 02/20/98 14.58.21 BY

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The following are instructions for use of the new Publication Tracking Form.

Prior to preparing a publication, it is the responsibility of the project manager to:

- Conduct a pre-publication integrated planning meeting to determine roles and responsibilities of each person involved with the publication process. All information pertaining to the publication and names of key members should be filled-in on the top portion of the form.
- Define the routing of the publication and interim required dates to the best of the project manager's and key member's availability. This information should be filled-in on the middle portion of the form **BEFORE** this form/report leaves the author's hands.

IF STEPS CANNOT BE FOLLOWED IN SEQUENCE—GO TO NEXT STEP. IF AUTHOR CANNOT SIGN-OFF—GIVE TO HIEU VU OR JOE CHANDLER (FOR START REPORTS); TO JOHN CAOILE (FOR COMMERCIAL REPORTS).

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